

## Not-Reportable Medical Events

The following data was gathered from the Nuclear Material Events Database (NMED) on October 27, 2010 in response to a request from Congressman Markey dated October 26, 2010.

Specifically, the data in this report respond to the Congressman's question "For each of the previous 5 years 2005-2010, please provide the number of times in which the NRC was made aware that the therapeutic and diagnostic medical use of radioactive materials was investigated, questioned, or identified as being at odds with the original medical treatment plan, but was ultimately not designated as a 'medical event'."

The following table lists the number of NMED event records that are designated as not-reportable medical events. These events **are not** medical events per 10CFR 35.3045. Note that an NMED event record may involve more than one patient or procedure. For example, in a review of past procedures, a hospital discovered that prostate brachytherapy seeds were incorrectly positioned in five patients over the last three years. This information is typically included in a single NMED event record. Thus, a single NMED event record may actually include multiple medical events.

**NMED Records of Not-Reportable Medical Events (not medical events)**

<b>Year</b>	<b>Events</b>
2005	39
2006	20
2007	18
2008	13
2009	9
2010*	5
<b>Total</b>	<b>104</b>

\*Note that calendar year 2010 is not yet complete.

The following section contains the NMED event record for each of the 104 events. The manufacturer and model number information for IAEA Category 1-3 sources and devices was redacted.

# Full Report

11/08/2010

**Item Number: 100430**

**Last Updated: 08/25/2010**

**Narrative:**

The University of Maryland reported that a patient only received approximately 50% of her prescribed dose during a treatment performed on 3/5/2010 for cervical cancer. The therapy involved five Cs-137 sources with a total activity of (5.07 GBq) 137 mCi. About 20 hours into the 45 hour procedure, the applicator became dislodged following a vigorous coughing episode by the patient. The remainder of the treatment was performed using external beam therapy.

**Event Date:** 03/05/2010

**Discovery Date:** 03/09/2010

**Report Date:** 03/10/2010

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: MD-07-014-01

Name: UNIVERSITY OF MARYLAND

NRC Docket Number: NA

City: BALTIMORE

NRC Program Code: NA

State: MD Zip Code: 21201

Responsible NRC Region: 1

**Site of Event:**

Site Name: BALTIMORE

State: MD

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: PATIENT INTERVENTION

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NO CORRECTIVE ACTION TAKEN

**Patient Information:**

**Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: CERVIX

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 137 mCi 5069 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: CERVIX

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 137 mCi 5069 MBq Dose: NR rad NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 50

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Radionuclide or Voltage (kVp/MeV): CS-137

Manufacturer: NR

Activity: 0.137 Ci

5.069 GBq

Model Number: NR

Serial Number: AGGREGATE

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: APPLICATOR

Model Number: NR

Manufacturer: NR

Serial Number: NR

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

MD100011

08/25/2010

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

West Valley Imaging reported that a 17-year-old female patient received 0.89 GBq (24 mCi) of Tc-99m for a Miraluma breast study instead of the prescribed 0.65 GBq (17.5 mCi) on 7/21/2010. The standard dose for an adult is 0.93 GBq (25 mCi) of Tc-99m Miraluma. Based on the patient's weight, which was 105 pounds, the pediatric dose was calculated at 0.65 GBq (17.5 mCi). The mammography technician assayed the dose at 0.89 GBq (24 mCi) and injected the patient. The patient received 4.3 cGy (rad) to the large intestine and 0.16 cGy (rad) whole body dose. The root cause was attributed to haste and the mammography technician not recognizing the fact that the patient was a pediatric patient. Corrective actions included better communications and cross-checking correct dosing, especially during pediatric procedures.

**Event Date:** 07/21/2010**Discovery Date:** 07/21/2010**Report Date:** 07/21/2010**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: NV-03-12038401

Name: WEST VALLEY IMAGING

NRC Docket Number: NA

City: HENDERSON

NRC Program Code: NA

State: NV Zip Code: 89146

Responsible NRC Region: 4

**Site of Event:**

Site Name: HENDERSON

State: NV

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: COMMUNICATION PROBLEM

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: N Date Informed:

**Given:**

Diagnostic Study: MIRALUMA SCAN (BREAST IMAGING)

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M Activity: 24 mCi 888 MBq

**Intended:**

Diagnostic Study: MIRALUMA SCAN (BREAST IMAGING)

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M Activity: 17.5 mCi 647.5 MBq

% Dose Exceeds Prescribed: 37.14

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: CARDINAL HEALTH

Activity: 0.024 Ci

0.888 GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN46117	07/28/2010		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
NV100011	07/28/2010		DCH	AGREEMENT STATE EVENT REPORT
LTR101018	10/21/2010		DCH	AGREEMENT STATE LETTER

**Narrative:**

Walla Walla Clinic reported that a patient scheduled to receive 1.11 GBq (30 mCi) of Tc-99m Myoview for a cardiac scan was mistakenly administered 1 GBq (27.1 mCi) of Tc-99m Medronate for a bone scan on 6/8/2010. The mistake was discovered shortly after administration when the technician noticed that the name on the dose did not match that of the patient. The bone scan patient and the cardiac patient had very similar sounding last names, which contributed to the error. The patient was notified of the error when he returned for his cardiac scan. The bone scan patient was sent home without being administered Tc-99m.

Event Date: 06/08/2010

Discovery Date: 06/08/2010

Report Date: 06/09/2010

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: WA-WN-M023

Name: WALLA WALLA CLINIC

NRC Docket Number: NA

City: WALLA WALLA

NRC Program Code: NA

State: WA Zip Code: 99362

Responsible NRC Region: 4

**Site of Event:**

Site Name: WALLA WALLA

State: WA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 06/08/2010

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: 27.1 mCi 1002.7 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEV

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0271 Ci

1.0027 GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN45996	06/15/2010		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
WA100041	06/15/2010		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Memorial Regional Hospital reported that a patient was administered 555 MBq (15 mCi) of Xe-133 on 3/29/2010, instead of the prescribed 370 MBq (10 mCi). It was determined that the nuclear medicine technician had not followed procedures. Neither the patient nor the patient's doctor have been informed of the incident. Corrective actions included requiring the involved technician review and follow established procedures.

Event Date: 03/29/2010

Discovery Date: 03/30/2010

Report Date: 03/30/2010

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-0008-8

Name: MEMORIAL REGIONAL HOSPITAL

NRC Docket Number: NA

City: HOLLYWOOD

NRC Program Code: NA

State: FL Zip Code: 33021

Responsible NRC Region: 1

**Site of Event:**

Site Name: HOLLYWOOD

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: N Date Informed:

**Given:**

Diagnostic Study: LUNG VENTILATION

Radiopharmaceutical: NA

Radionuclide: XE-133 Activity: 15 mCi 555 MBq

**Intended:**

Diagnostic Study: LUNG VENTILATION

Radiopharmaceutical: NA

Radionuclide: XE-133 Activity: 10 mCi 370 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2



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**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE GAS

Radionuclide or Voltage (kVp/MeV): XE-133

Manufacturer: NR

Activity: 0.015 Ci 0.555 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
FL10-041	05/13/2010		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The University of Alabama reported two diagnostic medical events that occurred on 1/6/2010, and were caused by the chemical breakdown of the radiopharmaceuticals. One patient received 0.23 GBq (6.19 mCi) of In-111 Octreotide IV and the other patient received 0.24 GBq (6.45 mCi) of In-111 Octreotide IV. Imaging took place four hours and 24 hours post injection. An altered biodistribution was noted in the heart, blood pool, and bone marrow. The liver appeared more intense than the spleen. It was determined that some of the In-111 Octreotide became unbound indium chloride prior to patient injection. On 1/7/2010, Covidian made an urgent drug recall for the lot number that the doses had come from. Dose estimates by the University determined that the maximum effective dose to either patient was 4.66 cSv (rem) and the maximum organ dose to the red marrow was 24 cGy (rad).

Event Date: 01/06/2010

Discovery Date: 01/07/2010

Report Date: 01/07/2010

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-0266

Name: UNIVERSITY OF ALABAMA

NRC Docket Number: NA

City: BIRMINGHAM

NRC Program Code: NA

State: AL Zip Code: 35294

Responsible NRC Region: 1

**Site of Event:**

Site Name: BIRMINGHAM

State: AL

**Additional Involved Party:**

License Number: NR

Name: COVIDIAN

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y Date Informed: 01/07/2010

**Given:**

Diagnostic Study: LIVER

Radiopharmaceutical: INDIUM CHLORIDE

Radionuclide: IN-111 Activity: 6.19 mCi 229.03 MBq

**Intended:**

Diagnostic Study: SPLEEN SCAN

Radiopharmaceutical: OCTREOTIDE

Radionuclide: IN-111 Activity: 6.19 mCi 229.03 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: Y Date Informed: 01/07/2010

**Given:**

Diagnostic Study: LIVER

Radiopharmaceutical: INDIUM CHLORIDE

Radionuclide: IN-111 Activity: 6.45 mCi 238.65 MBq

**Intended:**

Diagnostic Study: SPLEEN SCAN

Radiopharmaceutical: OCTREOTIDE

Radionuclide: IN-111 Activity: 6.45 mCi 238.65 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): IN-111

Activity: 0.00619 Ci 0.22903 GBq

**Source Number: 2**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): IN-111

Activity: 0.00645 Ci 0.23865 GBq

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
AL100006	03/09/2010		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Lake Norman Regional Medical Center (LNRMC) reported that a patient was implanted with 41 I-125 brachytherapy seeds using a Mick applicator on 11/19/2009. LNRMC initially stated that all 41 seeds were implanted into the patient's perineal soft tissue, inferior to the prostate gland. Each seed contained an activity of 11.47 MBq (0.31 mCi), with a total activity of 470.27 MBq (12.71 mCi). The patient was prescribed a dose of 14,400 cGy (rad) to the prostate gland. The D90 dose to the prostate was initially calculated to be 102.24 cGy (rad) or 0.71% of the prescribed dose. They stated that the patient may experience possible perineal soft tissue fibrosis due to the incident. The patient and referring physicians were notified of the incident. After further evaluation, the North Carolina Department of Health determined that the incident did not meet the criteria for a medical event. It was determined that the seeds had been implanted on the isoline. It was stated that the seeds could have been placed in better locations. However, 39 of the 41 seeds were placed within the prescribed area (within a few mm of the isoline). The cause was determined to be poor image quality of the prostate during ultrasound and difficult visualization of needle placement. Corrective actions included discontinuation of the procedure if the locations of the needles are not known with relative certainty.

Event Date: 11/19/2009

Discovery Date: 12/29/2009

Report Date: 12/29/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: NC-049-0527-3

Name: LAKE NORMAN REGIONAL MEDICAL CENTER

NRC Docket Number: NA

City: MOORESVILLE

NRC Program Code: NA

State: NC Zip Code: 28117

Responsible NRC Region: 1

**Site of Event:**

Site Name: MOORESVILLE

State: NC

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PERINEUM

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 12.71 mCi 470.27 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 12.71 mCi 470.27 MBq Dose: 14400 rad 144 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NR

Effect on Patient:

**Patient Number: 1A**

Patient Informed: Y Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PERINEUM

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 12.71 mCi 470.27 MBq Dose: NR rad NR Gy

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NR

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): I-125

Activity: 0.01271 Ci 0.47027 GBq

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: APPLICATOR

Model Number: NR

Manufacturer: MICK RADIO-NUCLEAR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45595	01/04/2010		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
NC090063	03/30/2010		DCH	AGREEMENT STATE EVENT REPORT
LTR100818	08/24/2010		DCH	NRC LETTER
NC090063A	08/24/2010		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Grandview Hospital reported a problem with a nuclear medicine scan on 12/11/2009. The supplier, Medi-Physics, was contacted and advised that the Tc-99m myoview dose revealed a thyroid uptake, but no cardiac uptake, in a patient they injected. Medi-Physics stated that they prepared a 30-ml kit of myoview on 12/11/2009 and the radiochemical purity was determined to be 91%. Medi-Physics confirmed with the Pennsylvania Bureau of Radiation Protection (BRP) that they dispensed 50 doses from the vial of myoview in question. Medi-Physics believes that 13 of those doses were administered to patients in Pennsylvania and New Jersey. Those doses were believed to contain between 296 and 370 MBq (8 and 10 mCi) of Tc-99m. They assured BRP that they have contacted all recipients and explained the problem. They repeated the quality check on the supply of myoview in the vial and determined that the tag was less than 1%. Medi-Physics is investigating the problem and will send the vial to the United Kingdom for chemical analysis once it is no longer radioactive. The BRP has been in contact with all parties involved and will continue to investigate the incident. This incident was retracted on 2/23/2010, based on the fact that the patient's dose was below reportable criteria. BRP is tracking the incident as number PA090035.

**Event Date:** 12/11/2009**Discovery Date:** 12/11/2009**Report Date:** 12/11/2009**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: PA-0220

Name: GRANDVIEW HOSPITAL

NRC Docket Number: NA

City: SELLERSVILLE

NRC Program Code: NA

State: PA Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: SELLERSVILLE

State: PA

**Additional Involved Party:**

License Number: PA-0515

Name: MEDI-PHYSICS

NRC Docket Number: NA

City: NR

NRC Program Code: NA

State: PA Zip Code: NR

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

Radionuclide: TC-99M Activity: 10 mCi 370 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR Activity: 0.01 Ci 0.37 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45563	12/17/2009	02/23/2010	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
EN45563A	02/24/2010	02/23/2010	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE

**Narrative:**

Heart Clinics Northwest reported that a patient prescribed 925 MBq (25 mCi) of Tc-99m Pertechnetate was administered a dose of 296 MBq (8 mCi) of Tc-99m Sestamibi on 8/24/2009 that was prescribed for another patient. The patient and physician were notified of the mistake. The whole body dose was calculated to be 0.133 cSv (rem) and the organ dose to the large intestine was 2.56 cSv (rem). This event occurred because the technologist failed to double-check his work while processing two patients. Corrective actions included counseling the technologist on the need for strict adherence to procedures.

Event Date: 08/24/2009

Discovery Date: 08/24/2009

Report Date: 08/25/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 46-27704-01

Name: HEART CLINICS NORTHWEST

NRC Docket Number: 03035760

City: SPOKANE

NRC Program Code: 02201

State: WA Zip Code: 99204

Responsible NRC Region: 4

**Site of Event:**

Site Name: COEUR D'ALENE

State: ID

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 08/24/2009

**Given:**

Diagnostic Study: MYOCARDIAL PERFUSION

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

8 mCi

296 MBq

**Intended:**

Diagnostic Study: GATED BLOOD POOL

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4)

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**



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MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.008 Ci

0.296 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45293	08/31/2009		DCH	EVENT NOTIFICATION
ML092570755	09/16/2009		RLS	LICENSEE REPORT

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**Item Number: 090688****Last Updated: 08/31/2009****Narrative:**

G.E. Healthcare reported sending two mislabeled Tc-99m unit doses to Ochsner on 7/9/2009. Ochsner ordered two 0.74 GBq (20 mCi) Tc-99m MDP doses and two patients were injected. After viewing the images, it was determined that the unit doses were mislabeled. An investigation of G.E. Healthcare was performed. A preliminary cause was determined to be a mix up of MDP cold vial with DTPA vial as they closely resemble each other with the same vial configuration and same color label. Contributing factors leading to the incident were a shortage in Tc-99m, late arrival of generators, increased number of kits to prepare, and a pharmacist working alone. Corrective actions involved reviewing procedures and discontinuing manual changes of inventory dispensed on prescription labels. The State of Louisiana is tracking the incident as number LA090017.

**Event Date:** 07/09/2009**Discovery Date:** 07/09/2009**Report Date:** 08/25/2009**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-5470-L01

Name: G.E. HEALTHCARE

NRC Docket Number: NA

City: NEW ORLEANS

NRC Program Code: NA

State: LA Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: NEW ORLEANS

State: LA

**Additional Involved Party:**

License Number: NR

Name: OCHSNER

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: RENAL BLOOD FLOW

Radiopharmaceutical: DTPA (DIETHYLTRIAMINE-PENTAACE

Radionuclide: TC-99M Activity: 20 mCi 740 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: RENAL BLOOD FLOW

Radiopharmaceutical: DTPA (DIETHYLTRIAMINE-PENTAACE

Radionuclide: TC-99M Activity: 20 mCi 740 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): TC-99M

Activity: 0.02 Ci 0.74 GBq

**Source Number: 2**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): TC-99M

Activity: 0.02 Ci 0.74 GBq

**References:****Reference Number:**

EN45291

**Entry Date:**

08/31/2009

**Retraction Date:****Coder Initials:**

DCH

**Reference Type:**EVENT NOTIFICATION REPORTED FROM AN  
AGREEMENT STATE

**Narrative:**

Lehigh Valley Hospital reported that a patient received a gamma knife treatment to the wrong side of the brain (right side neuralgia). The patient's treatment was halted at 47.40 minutes into the prescribed 55.63 minutes. The prescribed dose to the intended site (left side neuralgia) was 4,250 cGy (rad) to the 50% isodose line. The patient actually received 3,450 cGy (rad) to the 50% isodose line of the unintended site. It was determined that the written directive was generated for treatment of the wrong site. When the neurosurgeon noticed that they were not treating the correct site, treatment was stopped. The written directive was changed and the correct site was treated. The Pennsylvania Department of Environmental Protection was notified and suggested that while all treatment team members are present during a "time out" procedure, to have the patient state the side of his/her lesion or treatment and place an imaging marker to designate the treatment side. The State is tracking the incident as number PA090027.

Event Date: 07/29/2009

Discovery Date: 07/29/2009

Report Date: 07/29/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: PA-0264

Name: LEHIGH VALLEY HOSPITAL

NRC Docket Number: NA

City: BETHLEHEM

NRC Program Code: NA

State: PA Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: BETHLEHEM

State: PA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: GAMMA KNIFE

Organ: BRAIN

Radiopharmaceutical: NA

Radionuclide: CO-60 Activity: NR mCi NR MBq Dose: 0 rad 0 Gy

**Intended:**

Therapeutic Procedure: GAMMA KNIFE

Organ: BRAIN

Radiopharmaceutical: NA

Radionuclide: CO-56 Activity: NR mCi NR MBq Dose: 4250 rad 42.5 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 100

Effect on Patient:

**Patient Number: 1A**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: GAMMA KNIFE

Organ: BRAIN

Radiopharmaceutical: NA

Radionuclide: CO-60 Activity: NR mCi NR MBq Dose: 3450 rad 34.5 Gy

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: 100

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE GAMMA KNIFE

Manufacturer: NR

Model Number: NR

Serial Number: NR

Radionuclide or Voltage (kVp/MeV): CO-60

Activity: NR Ci NR GBq

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: GAMMA KNIFE UNIT

Model Number: NR

Manufacturer: NR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45241	08/10/2009	08/28/2009	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR090827	08/27/2009		DCH	NRC LETTER
LTR090827A	08/27/2009		DCH	NRC LETTER
EN45241A	08/31/2009	08/28/2009	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE

**Narrative:**

Memorial Hospital reported that a patient received two doses of Tl-201 instead of one dose for a diagnostic cardiovascular procedure on 6/16/2009. Each dose contained 0.27 GBq (7.2 mCi). Two nuclear medicine technologists were working in the same room. The second technologist misunderstood that the first technologist had already delivered the first dose. The estimated maximum internal organ dose received by the patient was 9.36 cSv (rem). Corrective actions included placing the patient's label on the dose, storing the doses in the hot laboratory until needed, requiring that the technologists verify injections that are written on orders, and tracking doses on a patient's work flow sheet.

**Event Date:** 06/16/2009**Discovery Date:** 06/16/2009**Report Date:** 06/16/2009**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-2567-1

Name: MEMORIAL HOSPITAL

NRC Docket Number: NA

City: JACKSONVILLE

NRC Program Code: NA

State: FL Zip Code: 32216

Responsible NRC Region: 1

**Site of Event:**

Site Name: JACKSONVILLE

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 IMPROVE RADIOACTIVE MATERIAL LABELING AND HANDLING
- 2 PROCEDURE MODIFIED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: CARDIOVASCULAR SYSTEM

Radiopharmaceutical: THALLOUS CHLORIDE

Radionuclide: TL-201      Activity: 14.4 mCi      532.8 MBq

**Intended:**

Diagnostic Study: CARDIOVASCULAR SYSTEM

Radiopharmaceutical: THALLOUS CHLORIDE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TL-201

Manufacturer: NR

Activity: 0.0144 Ci      0.5328 GBq

Model Number: NA

Serial Number: NA

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45135	06/22/2009		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
FL09-052	04/15/2010		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Johns Mercy Medical Center reported that a patient, undergoing brachytherapy treatment of the prostate on 5/21/2009, only received six of the prescribed 88 seeds. The seeds each contained 10.66 MBq (0.288 mCi) of I-125. The procedure was aborted because of concerns in placing additional needles into the patient. The prescribed dose was 14,500 cGy (rad). Family members were notified of the aborted procedure. This event was retracted on 5/22/2009, because the physician made a choice to terminate the brachytherapy treatment. The physician then rewrote the procedure to the patient to limit the prescribed number of seeds to six. With six seeds implanted into the patient, the prescribed dose was now met under the revised written directive.

Event Date: 05/21/2009

Discovery Date: 05/21/2009

Report Date: 05/22/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 24-00794-03

Name: SAINT JOHNS MERCY MEDICAL CENTER

NRC Docket Number: 03002283

City: SAINT LOUIS

NRC Program Code: 02120

State: MO Zip Code: 63141

Responsible NRC Region: 3

**Site of Event:**

Site Name: SAINT LOUIS

State: MO

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 05/21/2009

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 1.73 mCi 64.01 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 25.34 mCi 937.58 MBq Dose: 14500 rad 145 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 93.17

Effect on Patient:



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**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Radionuclide or Voltage (kVp/MeV): I-125

Manufacturer: NR

Activity: 0.02534 Ci 0.93758 GBq

Model Number: NR

Serial Number: AGGREGATE

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN45089	05/28/2009	05/22/2009	DCH	EVENT NOTIFICATION
LTR091231	01/06/2010		DCH	NRC LETTER
LTR100112	01/12/2010		DCH	NRC LETTER

**Narrative:**

During an inspection at MP Diagnostic, it was found that two patient's were given I-123 treatments greater than 20% above the prescribed amount of 7.4 MBq (200 uCi) on or about 4/2/2009. One patient received 11.77 MBq (318 uCi) and the other patient received 11.62 MBq (314 uCi). It was determined that DP Diagnostic was using dose ranges not acceptable by regulation. Corrective actions included implementing correct dosage protocols and maintaining administration records in an auditable fashion.

Event Date: 04/02/2009

Discovery Date: 04/02/2009

Report Date: 04/02/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-3407-1

Name: MP DIAGNOSTIC, LTD

NRC Docket Number: NA

City: MIAMI

NRC Program Code: NA

State: FL Zip Code: 33176

Responsible NRC Region: 1

**Site of Event:**

Site Name: MIAMI

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.318 mCi 11.766 MBq

**Intended:**

Diagnostic Study: NR

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.2 mCi 7.4 MBq

% Dose Exceeds Prescribed: 59

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.314 mCi 11.618 MBq

**Intended:**

Diagnostic Study: NR

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.2 mCi 7.4 MBq

% Dose Exceeds Prescribed: 57

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): I-123

Activity: 0.000318 Ci 0.011766 GBq

**Source Number: 2**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: NR

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): I-123

Activity: 0.000314 Ci 0.011618 GBq

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44953	04/08/2009		RLS	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR090713	07/14/2009		DCH	AGREEMENT STATE LETTER
FL09-032	07/28/2009		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The Department of Veterans Affairs reported that a prostate seed implant patient received a dose to an unintended site on 2/12/2009 at the Veterans Affairs Greater Los Angeles Healthcare System in Los Angeles, California. The patient was implanted with 108 I-125 seeds with a total activity of approximately 1.44 GBq (39 mCi) to deliver a prescribed dose of 14,500 cGy (rad) to the prostate. Post-implant imaging revealed that five I-125 seeds containing 66.6 MBq (1.8 mCi) were mistakenly placed more than 1 cm outside the prostate in the patient's perineum. The dose to the prostate was within 80% of the prescribed dose. The patient was notified on 2/13/2009. The prostate implant program was suspended until a causal analysis is completed. This event was caused by the physician's technique. In addition, this was a training case for a resident, who may have implanted the seeds. On 2/10/2010, the NRC requested additional patient dose data. The reassessed doses to the patients' rectum and periprostatic tissue were less than the prescribed dose to the prostate. Therefore, this event is not reportable.

Event Date: 02/12/2009

Discovery Date: 02/12/2009

Report Date: 02/13/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 03-23853-01VA

Name: DEPARTMENT OF VETERANS AFFAIRS

NRC Docket Number: 03034325

City: NORTH LITTLE ROCK

NRC Program Code: 03613

State: AR Zip Code: 72114

Responsible NRC Region: 3

**Site of Event:**

Site Name: LOS ANGELES

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed: 02/13/2009

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PERINEUM

Radiopharmaceutical: NA

Radionuclide: I-125                      Activity: 1.8 mCi                      66.6 MBq                      Dose: NR rad                      NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125                      Activity: 39 mCi                      1443 MBq                      Dose: 14500 rad                      145 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY                      Radionuclide or Voltage (kVp/MeV): I-125

Manufacturer: NR                      Activity: 0.0018 Ci                      0.0666 GBq

Model Number: NR

Serial Number: AGGREGATE

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44853	02/19/2009		DCH	EVENT NOTIFICATION
ML090570368	08/07/2009		RLS	LICENSEE REPORT
ML101440380	05/26/2010		RLS	INSPECTION REPORT
ML101440380	05/26/2010		RLS	NRC LETTER
LTR100603	06/09/2010		DCH	NRC LETTER
ML101880329	07/20/2010		RLS	ENFORCEMENT CONFERENCE
ML101880329	07/20/2010		RLS	NRC LETTER
ML101970407	08/16/2010		RLS	LICENSEE REPORT
ML102350127	08/24/2010		RLS	NOTICE OF VIOLATION
ML102350127	08/24/2010		RLS	NRC LETTER
ML102350261	08/24/2010		RLS	NRC NEWS ANNOUNCEMENT
ML102300006	09/01/2010		RLS	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
ML102430195	09/01/2010		RLS	LICENSEE REPORT

**Narrative:**

The Department of Veterans Affairs reported two medical events involving patients who had undergone permanent implant prostate seed brachytherapy in 2005 at the Greater Los Angeles Healthcare System in Los Angeles, California. The events were discovered during a review on 1/27/2009. The first event occurred on 6/8/2005 when a patient was implanted with 62 I-125 seeds containing a total activity of 0.75 GBq (20.3 mCi) to deliver a prescribed prostate dose of 14,500 cGy (rad). However, 10 seeds were later determined to be outside the prostate and delivered a dose initially estimated to be 14,500 cGy (rad) to a 0.36 cm<sup>3</sup> volume of the rectum. The second case occurred on 11/23/2005 when a patient was implanted with 88 I-125 seeds containing a total activity of 1.07 GBq (28.8 mCi) to deliver a prescribed dose of 14,500 cGy (rad). However, 13 seeds were later determined to be outside the prostate and delivered a dose initially estimated to be 14,500 cGy (rad) to a 0.77 cm<sup>3</sup> volume of the rectum. In both cases, the dose delivered to the intended treatment site was within 80% of the prescribed dose. The causes of these events were the poor quality of the ultrasound unit that was used during the procedures and the lack of a structured resident training program in prostate brachytherapy. Both patients were notified of the events and no adverse effects to the patients are expected. Corrective actions included procedure modification and obtaining a new trans-rectal ultrasound unit capable of providing high quality images. On 2/10/2010, the NRC requested additional patient dose data. The reassessed doses to the patients' rectum and periprostatic tissue were less than the prescribed dose to the prostate. Therefore, these events are not reportable.

Event Date: 06/08/2005

Discovery Date: 01/27/2009

Report Date: 01/28/2009

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 03-23853-01VA

Name: DEPARTMENT OF VETERANS AFFAIRS

NRC Docket Number: 03034325

City: NORTH LITTLE ROCK

NRC Program Code: 03613

State: AR Zip Code: 72114

Responsible NRC Region: 3

**Site of Event:**

Site Name: LOS ANGELES

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: DEFECTIVE OR INADEQUATE PROCEDURE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 NEW EQUIPMENT OBTAINED

**Patient Information:**

**Patient Number: 1**

Patient Informed: Y

Date Informed: 01/28/2009

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: RECTUM

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 3.27 mCi 120.99 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 20.3 mCi 751.1 MBq Dose: 14500 rad 145 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: Y

Date Informed: 01/29/2009

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: RECTUM

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 4.25 mCi 157.25 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 28.8 mCi 1065.6 MBq Dose: 14500 rad 145 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): I-125

Activity: 3.27 Ci 120.99 GBq

**Source Number: 2**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): I-125

Activity: 4.25 Ci 157.25 GBq

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44813	02/03/2009		DCH	EVENT NOTIFICATION
ML090420344	02/23/2009		RLS	LICENSEE REPORT
ML101440380	05/26/2010		RLS	INSPECTION REPORT
ML101440380	05/26/2010		RLS	NRC LETTER
LTR100603	06/09/2010		DCH	NRC LETTER
ML101880329	07/20/2010		RLS	ENFORCEMENT CONFERENCE
ML101880329	07/20/2010		RLS	NRC LETTER
ML101970407	08/16/2010		RLS	LICENSEE REPORT
ML102350127	08/24/2010		RLS	NOTICE OF VIOLATION

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ML102350127	08/24/2010	RLS	NRC LETTER
ML102350261	08/24/2010	RLS	NRC NEWS ANNOUNCEMENT
ML102300006	09/01/2010	RLS	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
ML102430195	09/01/2010	RLS	LICENSEE REPORT



**Narrative:**

Jewish Hospital Louisville (JHL) reported injecting an 89 year old patient with 92.5 MBq (2.5 mCi) of In-111 DTPA instead of the prescribed 18.5 MBq (0.5 mCi) for a cisternogram procedure. The procedure was performed on 12/14/2008 and the technologist present had not previously participated in that type of procedure. The dose vial delivered by the pharmacy was assayed at 118.4 MBq (3.2 mCi) and given to the radiologist for intrathecal injection. JHL calculated that the dosage received by the patient was 92.5 MBq (2.5 mCi).

Event Date: 12/14/2008

Discovery Date: 12/14/2008

Report Date: 12/15/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: KY-201-115-22

Name: JEWISH HOSPITAL LOUISVILLE

NRC Docket Number: NA

City: LOUISVILLE

NRC Program Code: NA

State: KY Zip Code: 40202

Responsible NRC Region: 1

**Site of Event:**

Site Name: LOUISVILLE

State: KY

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: Y

Date Informed: 12/15/2008

**Given:**

Diagnostic Study: CISTERNOGRAM

Radiopharmaceutical: DTPA (DIETHYLTRIAMINE-PENTAACE

Radionuclide: IN-111 Activity: 2.5 mCi 92.5 MBq

**Intended:**

Diagnostic Study: CISTERNOGRAM

Radiopharmaceutical: DTPA (DIETHYLTRIAMINE-PENTAACE

Radionuclide: IN-111 Activity: 0.5 mCi 18.5 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): IN-111

Manufacturer: NR

Activity: 0.0025 Ci

0.0925 GBq

Model Number: NA

Serial Number: NA

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

KY080006

01/09/2009

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

Trinitas Hospital reported that a patient possibly received a medical dose that was less than 50% of the prescribed dose. They suspected movement of the catheter during an endobronchial high dose rate (HDR) remote afterloading treatment procedure, which may have resulted in a single fraction differing from the prescribed dose by more than 50%. Both the patient and the referring physician were notified by the authorized user. The patient had an endobronchial catheter placed in the right bronchus. The patient received a CT scan to determine the catheter location and treatment dwell positions. The patient was monitored by nurses during the treatment planning process. The patient received the treatment and was disconnected from the HDR unit. The technologist that removed the catheter from the patient noted that it was not at the intended location. The patient may have dislodged the catheter when coughing or wiping mouth secretions. The pulmonologist and authorized user will perform a bronchoscopy in two weeks to determine if a medical event occurred. Corrective actions included requiring that the authorized user remove all endobronchial catheters post treatment in the future to prevent any ambiguity with regard to length of catheter in the patient, check marked position of the catheter at planning CT and both pre and post treatment, and measure the catheter length outside the nares prior to planning CT and pre and post treatment. The event was retracted on 12/31/2008 based on the patient's clinical response, which suggests that the catheter was correctly positioned during the treatment.

Event Date: 12/17/2008

Discovery Date: 12/17/2008

Report Date: 12/18/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 29-04333-01

Name: TRINITAS HOSPITAL

NRC Docket Number: 03002476

City: ELIZABETH

NRC Program Code: 02120

State: NJ Zip Code: 07207

Responsible NRC Region: 1

**Site of Event:**

Site Name: ELIZABETH

State: NJ

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 12/18/2008

**Given:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, HDR

Organ: BRONCHUS

Radiopharmaceutical: NA

Radionuclide: NR Activity: NR mCi NR MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, HDR

Organ: BRONCHUS

Radiopharmaceutical: NA

Radionuclide: NR Activity: NR mCi NR MBq Dose: NR rad NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NR

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY Radionuclide or Voltage (kVp/MeV): NR

Manufacturer: NR Activity: NR Ci NR GBq

Model Number: NR

Serial Number: NR

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: REMOTE AFTERLOADER HDR

Model Number: NR

Manufacturer: NR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44733	12/24/2008	12/31/2008	DCH	EVENT NOTIFICATION
EN44733A	01/05/2009	12/31/2008	DCH	EVENT NOTIFICATION

**Narrative:**

Nevada Physicians Imaging (NPI) reported inadvertently administering 8.14 MBq (220 uCi) of I-123 to the wrong patient. The intended patient was scheduled to receive a thyroid scan. The wrong patient shared the same name as the intended patient. As a result, the wrong patient underwent a thyroid scan. It is unknown what procedure the wrong patient was to receive. The patient has not been notified of the incorrect treatment. NPI will notify the prescribing physician. The Nevada State Health Department investigated the incident. NPI estimated the dose to the wrong patient at 3.56 cGy (rad) to the thyroid. Corrective actions included confirming a patient's name and birth date by scheduling staff and the nuclear medicine technologist prior to any nuclear medicine administration.

Event Date: 11/21/2008

Discovery Date: 11/21/2008

Report Date: 11/21/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: NV-03-12051401

Name: NEVADA PHYSICIANS IMAGING

NRC Docket Number: NA

City: LAS VEGAS

NRC Program Code: NA

State: NV Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: LAS VEGAS

State: NV

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: N Date Informed:

**Given:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.22 mCi 8.14 MBq

**Intended:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: NR Activity: NR mCi NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-123

Manufacturer: NR

Activity: 0.00022 Ci 0.00814 GBq

Model Number: NA

Serial Number: NA

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44677	12/01/2008		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR090206	02/09/2009		DCH	AGREEMENT STATE LETTER

**Narrative:**

South Texas Radiology Imaging Centers reported that a patient was mistakenly administered 0.14 GBq (3.8 mCi) of I-131 on 9/2/2008 instead of the prescribed 1.11 GBq (30 mCi) of Tc-99m for a routine bone scan. In placing the order for a nuclear medicine study, the referring physician's receptionist had first checked "Bone Scan – Total Body," but then drew a line through that entry and marked "I-131 Whole Body Scan." The appropriateness of the study for the patient was not verified by the referring physician, the nuclear medicine technologist, or the authorized physician user. The error was discovered on 9/4/2008, when the patient returned to the center for imaging 48 hours after administration. The estimated dose to the patient's thyroid is 4,940 cSv (rem). The State Agency considers the incident reportable and lists it as meeting the Abnormal Occurrence criteria. However, the NRC determined that this was not a reportable event because the patient received the dose listed on the incorrect written directive. Corrective actions included reprimanding personnel, modifying procedures, and providing additional training to personnel.

Event Date: 09/02/2008

Discovery Date: 09/04/2008

Report Date: 10/02/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TX-L00325

Name: SOUTH TEXAS RADIOLOGY IMAGING CENTERS

NRC Docket Number: NA

City: SAN ANTONIO

NRC Program Code: NA

State: TX Zip Code: 78229

Responsible NRC Region: 4

**Site of Event:**

Site Name: SAN ANTONIO

State: TX

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 PERSONNEL REPRIMANDED
- 2 PERSONNEL RECEIVED ADDITIONAL TRAINING
- 3 PROCEDURE MODIFIED

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 09/04/2008

**Given:**

Therapeutic Procedure: SODIUM IODIDE - D

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131      Activity: 3.8 mCi      140.6 MBq      Dose: 4940 rad      49.4 Gy

**Intended:**

Diagnostic Study: WHOLE BODY BONE

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M      Activity: 30 mCi      1110 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM      Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR      Activity: 0.0038 Ci      0.1406 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TX-I-8568	10/17/2008		DCH	AGREEMENT STATE EVENT REPORT
LTR081112	11/12/2008		RLS	NRC LETTER
LTR090311	03/24/2009		DCH	AGREEMENT STATE LETTER
TX080032	09/29/2009		DCH	AGREEMENT STATE EVENT REPORT
TX-I-8568A	09/29/2009		DCH	AGREEMENT STATE EVENT REPORT



**Narrative:**

The Department of Veterans Affairs (VA) reported that three patients prescribed permanent implant prostate brachytherapy procedures at the VA Medical Center in Washington, DC, may have received D90 doses less than 80% of the prescribed doses. Each patient was prescribed a dose of 125 Gy (12,500 rad) using Pd-103 seeds. The treatments occurred on 12/4/2007, 3/5/2008, and 4/2/2008. These medical events were discovered on 9/24/2008 as a result of an ongoing review of the incident reported in NMED Item 080296. Subsequent reviews determined that the D90 doses were greater than 80% of the prescribed doses and that all three patients received adequate doses. The initially identified discrepancy in the D90 doses was due to post implant prostate edema. VA retracted the incident report on 12/2/2008.

Event Date: 12/04/2007

Discovery Date: 09/24/2008

Report Date: 09/26/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 03-23853-01VA

Name: DEPARTMENT OF VETERANS AFFAIRS

NRC Docket Number: 03034325

City: NORTH LITTLE ROCK

NRC Program Code: 03613

State: AR Zip Code: 72114

Responsible NRC Region: 3

**Site of Event:**

Site Name: WASHINGTON

State: DC

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 10000 rad 100 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 12500 rad 125 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 80

Effect on Patient:

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**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 10125 rad 101.25 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 12500 rad 125 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 81

Effect on Patient:

**Patient Number: 3**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 10250 rad 102.5 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: 12500 rad 125 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 82

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): PD-103

Activity: NR Ci NR GBq

**Source Number: 2**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): PD-103

Activity: NR Ci NR GBq

**Source Number: 3**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): PD-103

Activity: NR Ci NR GBq

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44524	10/02/2008	12/02/2008	DCH	EVENT NOTIFICATION
ML082880661	10/27/2008		RLS	LICENSEE REPORT
ML082880041	11/03/2008		RLS	LICENSEE REPORT

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ML082880717	11/03/2008		RLS	CONFIRMATORY ACTION LETTER
ML082890402	11/03/2008		RLS	NRC NEWS ANNOUNCEMENT
EN44524A	12/03/2008	12/02/2008	DCH	EVENT NOTIFICATION
LTR081230	01/13/2009		DCH	NRC LETTER
ML101440380	05/26/2010		RLS	INSPECTION REPORT
ML101440380	05/26/2010		RLS	NRC LETTER
LTR100603	06/09/2010		DCH	NRC LETTER
ML101880329	07/20/2010		RLS	ENFORCEMENT CONFERENCE
ML101880329	07/20/2010		RLS	NRC LETTER
ML101970407	08/16/2010		RLS	LICENSEE REPORT
ML102350127	08/24/2010		RLS	NOTICE OF VIOLATION
ML102350127	08/24/2010		RLS	NRC LETTER
ML102350261	08/24/2010		RLS	NRC NEWS ANNOUNCEMENT
ML102300006	09/01/2010		RLS	NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION
ML102430195	09/01/2010		RLS	LICENSEE REPORT

**Narrative:**

The Texas Department of State Health (DSH) initially reported that Texas Oncology PA Klabzuba (TOPAK) was cited for not having a current calibration for their Sr-90 eye applicator (Amersham model SIA.20, serial #0964ML). The applicator contained an original activity of 19.68 GBq (53.2 mCi). DSH based their citing on a new calibration methodology developed by the National Institute of Standards and Testing (NIST). The DSH determined that the absorbed dose rate from the eye applicator, using the new calibration methodology, was 56 cGy/second (rad/second), some 54% higher than what had been provided by the manufacturer. Although that absorbed dose rate was considerably different, the authorized physician user stated that the therapeutic response to the patients with the treatment device was acceptable. TOPAK received the applicator prior to NIST's reevaluation and changes to the calibration of Sr-90 eye applicators. When manufactured, the TOPAK source was calibrated according to the procedures available at that time. TOPAK used that calibrated activity value and decay corrections to determine the time needed to deliver a specific dose to the patients. The authorized physician user was getting expected results and the written directive included a standard dose to the patient. The three patients were prescribed two 1,500 cGy (rad) fractions separated by one week. Because the three patients received their treatments as prescribed on their written directives, the NRC concluded that no medical events occurred.

Event Date: 08/19/2008

Discovery Date: 08/19/2008

Report Date: 08/19/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TX-L05545

Name: TEXAS ONCOLOGY PA KLABZUBA

NRC Docket Number: NA

City: FORT WORTH

NRC Program Code: NA

State: TX Zip Code: 76104

Responsible NRC Region: 4

**Site of Event:**

Site Name: FORT WORTH

State: TX

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: OTHER

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NO CORRECTIVE ACTION TAKEN

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U                      Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

**Intended:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: U                      Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

**Intended:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 3**

Patient Informed: U                      Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

**Intended:**

Therapeutic Procedure: BRACHY, EYE APPLICATOR

Organ: EYE

Radiopharmaceutical: NA

Radionuclide: SR-90                      Activity: 53.2 mCi                      1968.4 MBq                      Dose: 3000 rad                      30 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	SEALED SOURCE BRACHYTHERAPY	Radionuclide or Voltage (kVp/MeV):	SR-90
Manufacturer:	NR	Activity:	0.0532 Ci 1.9684 GBq
Model Number:	NR		
Serial Number:	NR		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	EYE APPLICATOR	Model Number:	SIA.20
Manufacturer:	AMERSHAM	Serial Number:	0964ML

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44426	08/28/2008		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
TX-I-8539	08/28/2008		DCH	AGREEMENT STATE EVENT REPORT
LTR081103	11/05/2008		DCH	AGREEMENT STATE LETTER
LTR081105	11/05/2008		DCH	AGREEMENT STATE LETTER
LTR081211	12/15/2008		DCH	AGREEMENT STATE LETTER
LTR090402	04/02/2009		DCH	NRC LETTER

**Narrative:**

Memorial Hospital reported that a patient was injected with 0.9 GBq (24.3 mCi) of Tc-99m sestamibi for a cardiac scan instead of intended dose of Tc-99m medronate for a whole body bone scan. The error was not discovered until the patient returned three hours later for scanning and it was observed that the radionuclide was not properly tagged. The patient was informed as well as the department manager and the radiologist. The patient will return on 7/21/2008 for the proper study. The highest organ exposure was the upper large intestine wall at 4.32 cGy (rad). The technician involved has been reinstructed on the extreme importance of checking all the labels prior to preparing and administering any radiopharmaceutical.

Event Date: 07/18/2008

Discovery Date: 07/18/2008

Report Date: 07/28/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 49-10982-02

Name: MEMORIAL HOSPITAL OF SHERIDAN COUNTY

NRC Docket Number: 03013772

City: SHERIDAN

NRC Program Code: 02120

State: WY Zip Code: 82801

Responsible NRC Region: 4

**Site of Event:**

Site Name: SHERIDAN

State: WY

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M Activity: 24.3 mCi 899.1 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: NR mCi NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0243 Ci 0.8991 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN44371	07/31/2008		DCH	EVENT NOTIFICATION



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**Item Number: 080388****Last Updated: 09/17/2008****Narrative:**

Southern Regional Medical Center reported that a patient was administered 925 MBq (25 mCi) of Tc-99m MDP on 5/30/2008 for a bone scan. Approximately three hours later, the patient was inadvertently injected a second time with 740 MBq (20 mCi) of Tc-99m MDP.

**Event Date:** 05/30/2008**Discovery Date:** 05/30/2008**Report Date:** 05/30/2008**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: GA-1039-1

Name: SOUTHERN REGIONAL MEDICAL CENTER

NRC Docket Number: NA

City: RIVERDALE

NRC Program Code: NA

State: GA Zip Code: 30274

Responsible NRC Region: 1

**Site of Event:**

Site Name: RIVERDALE

State: GA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity:

20 mCi

740 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.02 Ci	0.74 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
GA-2008-20I	07/15/2008		DCH	AGREEMENT STATE EVENT REPORT
LTR080715	07/15/2008		DCH	AGREEMENT STATE LETTER
GA-2008-20IA	09/17/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Mary Medical Center reported that a patient prescribed to receive 0.93 GBq (25 mCi) of Tc-99m MDP for a bone scan received 0.85 GBq (23 mCi) of Tc-99m Sestamibi for a heart scan. The event occurred on 6/9/2008. The bone scan will be rescheduled. The cause of the incident was determined to be human error by the nuclear medicine technologist. Corrective actions included requiring that the technologist take a "time out" prior to each injection to review the dose to be administered, the dose ordered, and to fully and thoroughly check the markings in place on syringes and vials to prevent a recurrence. According to the manufacture's product insert, the patient could be expected to receive a maximum dose of 41.4 mGy (4.14 rad) to the upper large intestinal wall and a whole body dose of 3.83 mGy (383 mrad).

Event Date: 06/09/2008

Discovery Date: 06/09/2008

Report Date: 06/23/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: WA-WN-M0101-1

Name: SAINT MARY MEDICAL CENTER

NRC Docket Number: NA

City: WALLA WALLA

NRC Program Code: NA

State: WA Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: WALLA WALLA

State: WA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL REPRIMANDED

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y                      Date Informed:

**Given:**

Diagnostic Study:            CARDIAC SCAN

Radiopharmaceutical:    SESTAMIBI/CARDIOLITE

Radionuclide:    TC-99M                      Activity:            23 mCi                      851 MBq

**Intended:**

Diagnostic Study:            BONE SCAN

Radiopharmaceutical:    MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed:            NA

% Dose is Less Than Prescribed:        NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material:    UNSEALED SOURCE RADIOPHARM                      Radionuclide or Voltage (kVp/MeV):    TC-99M

Manufacturer:                      NR    Activity:                                      0.023 Ci                                      0.851 GBq

Model Number:                      NA

Serial Number:                      NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
WA-08-037	07/02/2008		DCH	AGREEMENT STATE EVENT REPORT
EN44328	07/07/2008		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE

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**Item Number: 080298****Last Updated: 07/21/2008****Narrative:**

Reid Hospital & Health Care Services reported that a patient prescribed to receive a regular treadmill stress test instead received a treadmill myocardial perfusion imaging test using Tc-99m. The patient was administered 0.6 GBq (16.3 mCi) of Tc-99m for the resting portion of the test and 1.3 GBq (35.3 mCi) of Tc-99m for the stress portion of the test. Reid Hospital is conducting an investigation into the incident. They will inform the patient of the error. Reid Hospital retracted the incident on 5/21/2008, based on the fact that the error does not meet reporting requirements.

**Event Date:** 05/19/2008**Discovery Date:** 05/19/2008**Report Date:** 05/20/2008**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 13-03284-02

Name: REID HOSPITAL &amp; HEALTH CARE SERVICES

NRC Docket Number: 03001614

City: RICHMOND

NRC Program Code: 02230

State: IN Zip Code: 47374

Responsible NRC Region: 3

**Site of Event:**

Site Name: RICHMOND

State: IN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: N Date Informed:

**Given:**

Diagnostic Study: MYOCARDIAL PERFUSION

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M Activity: 51.6 mCi 1909.2 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0516 Ci 1.9092 GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN44224	05/27/2008	05/21/2008	DCH	EVENT NOTIFICATION
LTR080715	07/21/2008		DCH	NRC LETTER

**Narrative:**

Baptist Hospital reported that a patient received an unprescribed dose of 0.19 GBq (5 mCi) of I-131 on 5/16/2008. The patient received a prescribed dose of 5.6 GBq (150 mCi) of I-131 on 5/9/2008. However, when the patient returned to the hospital on 5/16/2008 to receive a scan, the nuclear medicine technologist mistakenly administered the unprescribed dose of 0.19 GBq (5 mCi) of I-131. The patient and doctor have been notified of the event. The NRC Medical Radiation Safety Team investigated the incident and determined that it did not meet reportable criteria due to the fact that the patient's thyroid was ablated (totally removed). Therefore, the patient did not receive dose that meets the threshold reporting requirements.

Event Date: 05/16/2008

Discovery Date: 05/16/2008

Report Date: 05/16/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-0158-1

Name: BAPTIST HOSPITAL

NRC Docket Number: NA

City: PENSACOLA

NRC Program Code: NA

State: FL Zip Code: 32501

Responsible NRC Region: 1

**Site of Event:**

Site Name: PENSACOLA

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 05/16/2008

**Given:**

Therapeutic Procedure: SODIUM IODIDE - T

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131

Activity:

5 mCi

185 MBq

Dose:

NR rad

NR Gy

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR

Activity: 0.005 Ci 0.185 GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN44222	05/27/2008		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR080625	06/26/2008		DCH	NRC LETTER
FL08-079	07/25/2008		DCH	AGREEMENT STATE EVENT REPORT



**Narrative:**

Saint Thomas Hospital reported that a patient, scheduled to receive 0.19 GBq (5 mCi) of Tc-99m cholotec, was administered 0.79 GBq (21.4 mCi) of Tc-99m MDP on 5/18/2007. The pharmacist drew the MDP dosage and placed the cholotec label on the syringe. The nuclear medicine student did not properly assay the dosage prior to administration. Corrective actions included instituting new procedures to prevent recurrence.

Event Date: 05/18/2007

Discovery Date: 05/18/2007

Report Date: 05/30/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-19001-B98

Name: SAINT THOMAS HOSPITAL

NRC Docket Number: NA

City: NASHVILLE

NRC Program Code: NA

State: TN Zip Code: 37202

Responsible NRC Region: 1

**Site of Event:**

Site Name: NASHVILLE

State: TN

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M Activity: 21.4 mCi 791.8 MBq

**Intended:**

Diagnostic Study: HEPATOBILIARY

Radiopharmaceutical: MEBROFENIN/CHOLETECH

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0214 Ci 0.7918 GBq
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
TN07101	04/16/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Mary's Medical Center reported that a patient, not scheduled for a radioactive material test, was administered 1.48 GBq (40 mCi) of Tc-99m sestamibi on 3/30/2007. It was determined that the technologist did not verify the appropriate doctor's orders prior to proceeding with the test. The patient was scheduled in the electronic scheduling system; however, the doctor's order was for the previous year. The patient was under the impression that the doctor wanted him to schedule a stress test as well as some other blood work. When the patient requested to schedule the stress test and blood work, the scheduler saw the old order for 2006 and misinterpreted it. The patient and physician were notified of the incident. Corrective actions included generating a new procedure.

Event Date: 03/30/2007

Discovery Date: 03/30/2007

Report Date: 04/03/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47010

Name: SAINT MARY'S MEDICAL CENTER, INC.

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37917

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 03/30/2007

**Given:**

Diagnostic Study: CARDIAC PERFUSION

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

40 mCi

1480 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.04 Ci

1.48 GBq

Model Number: NA

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

TN07070

04/16/2008

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Mary's Medical Center reported that a patient scheduled for a non-radioactive material stress test was administered 0.41 GBq (11.2 mCi) of Tc-99m myoview on 2/17/2007. It was determined that the technologist quickly looked at the order, but failed to notice the test prescribed. The patient, physician, and RSO were notified of the incident. Corrective actions included providing additional training to the technologist.

Event Date: 02/17/2007

Discovery Date: 02/17/2007

Report Date: 02/20/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47010

Name: SAINT MARY'S MEDICAL CENTER, INC.

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37917

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVE NEW TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 02/17/2007

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEWS

Radionuclide: TC-99M

Activity:

11.2 mCi

414.4 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0112 Ci 0.4144 GBq
Model Number:	NA		
Serial Number:	NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN07026	04/15/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Mary's Medical Center reported that a patient was mistakenly administered a second dose of Tc-99m when the appropriate dose had already been administered. On 1/22/2007, the patient was administered 0.74 GBq (20 mCi) of Tc-99m HDP at the North complex for a bone scan. The patient was then instructed to go to Saint Mary's main campus for a CT scan and return to the North complex to complete the bone scan. However, when the technician at the main campus saw the physician's order, which included the bone scan, she instructed the Nuclear Medicine Department to administer a bone scan. The technician injected the patient with 1.01 GBq (27.2 mCi) of Tc-99m HDP, not realizing that the patient had already received 0.74 GBq (20 mCi). The physician and patient were notified of the error. A new policy was developed and instituted. The root cause appears to be the temporary occurrence of having one facility that was not fully operational.

Event Date: 01/22/2007

Discovery Date: 01/22/2007

Report Date: 01/22/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47010

Name: SAINT MARY'S MEDICAL CENTER, INC.

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37917

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:**

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**Patient Number:** 1

Patient Informed: Y

Date Informed: 01/22/2007

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: HYDROXYMETHYLENE DIPHOSPHONATE

Radionuclide: TC-99M

Activity: 27.2 mCi

1006.4 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0272 Ci

1.0064 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

TN07022

03/17/2008

DCH

AGREEMENT STATE EVENT REPORT



**Narrative:**

Middle Tennessee Medical Center reported administering 185 MBq (5 mCi) of Tc-99m choletec to a patient on 1/10/2007 that was not prescribed a nuclear medicine test. The technician glanced through the patient's chart and saw an order that appeared to be a hepatobiliary scan. After the patient was injected and placed over the camera for imaging, the technician reviewed the chart again and discovered the order was not for a hepatobiliary scan. The patient, RSO, and referring physician were notified of the error. The technician was counseled about reviewing a patient's chart completely prior to injection.

**Event Date:** 01/10/2007**Discovery Date:** 01/10/2007**Report Date:** 01/19/2007**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-75099

Name: MIDDLE TENNESSEE MEDICAL CENTER

NRC Docket Number: NA

City: MURFREESBORO

NRC Program Code: NA

State: TN Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: MURFREESBORO

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 01/10/2007

**Given:**

Diagnostic Study: HEPATOBILIARY

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M

Activity:

5 mCi

185 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.005 Ci

0.185 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

TN07015

03/17/2008

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Mary's Medical Center reported that a wrong patient ( an 88-year-old female) patient was injected with 0.15 GBq (4.1 mCi) of Tc-99m cholotec on 11/15/2006. The patient was not scheduled for any diagnostic study. The technologist entered the room, but did not check the patient's bracelet. The technologist received inservice training and a new policy was instituted to prevent recurrence.

Event Date: 11/15/2006

Discovery Date: 11/15/2006

Report Date: 12/29/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-07003

Name: SAINT MARY'S MEDICAL CENTER FO CAMPBELL COUNTY

NRC Docket Number: NA

City: LA FOLLETTE

NRC Program Code: NA

State: TN Zip Code: 37766

Responsible NRC Region: 1

**Site of Event:**

Site Name: LA FOLLETTE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 11/15/2006

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M

Activity:

4.1 mCi

151.7 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0041 Ci 0.1517 GBq
Model Number:	NA		
Serial Number:	NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN06159	02/28/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Vanderbilt University reported that the wrong patient received 0.38 GBq (10.2 mCi) of straight Tc-99m for a thyroid study on 11/7/2006. The patient was prescribed to receive a diagnostic dosage containing 0.48 GBq (13 mCi) of Tc-99m myoview for a cardiac scan. Both dosages were stored behind the L-block in the hot laboratory. A student technologist identified the patient for the heart study, but mistakenly took the Tc-99m thyroid study dosage and injected the patient. She notified the senior technologist of the error. The physician was contacted and advised the technicians to administer the myoview dosage to complete the cardiac scan. The patient was notified of the incident. The patient's EDE was calculated as 4.81 mSv (481 mrem) and the highest organ dose was estimated to be 2.11 cSv (rem) to the ULI. Corrective actions included additional training to personnel.

Event Date: 11/07/2006

Discovery Date: 11/07/2006

Report Date: 11/08/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-19021

Name: VANDERBILT UNIVERSITY

NRC Docket Number: NA

City: NASHVILLE

NRC Program Code: NA

State: TN Zip Code: 37232

Responsible NRC Region: 1

**Site of Event:**

Site Name: NASHVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

---

**Patient Number:** 1

Patient Informed: Y

Date Informed: 11/07/2006

**Given:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: NA

Radionuclide: TC-99M

Activity:

10.2 mCi

377.4 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEW

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0102 Ci

0.3774 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

TN06137

**Entry Date:**

02/28/2008

**Retraction Date:**

**Coder Initials:**

DCH

**Reference Type:**

AGREEMENT STATE EVENT REPORT

**Narrative:**

Middle Tennessee Medical Center reported that the wrong patient received 0.74 GBq (20 mCi) of Tc-99m MDP for a bone scan. The technologist checked the patient's arm band, noted the correct first and last names, and administered the Tc-99m. The technologist then looked at the patient's chart for additional information and discovered the mistake. The technologist notified the operations manager and the nurse, but did not notify the RSO. The RSO learned of the incident two months later. It was determined that the technologist failed to follow procedures regarding two methods of identifying patients. The Radiation Safety Committee developed procedures to assure the RSO is notified.

Event Date: 07/18/2006

Discovery Date: 07/18/2006

Report Date: 09/29/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-75009-B99

Name: MIDDLE TENNESSEE MEDICAL CENTER

NRC Docket Number: NA

City: MURFREESBORO

NRC Program Code: NA

State: TN Zip Code: 37133

Responsible NRC Region: 1

**Site of Event:**

Site Name: MURFREESBORO

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

2 PERSONNEL RECEIVE IMPROVED SUPERVISION

**Patient Information:**

---

**Patient Number:** 1

Patient Informed: Y

Date Informed: 07/18/2006

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity:

20 mCi

740 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.02 Ci

0.74 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

TN06123

**Entry Date:**

02/27/2008

**Retraction Date:**

**Coder Initials:**

DCH

**Reference Type:**

AGREEMENT STATE EVENT REPORT



**Narrative:**

Vanderbilt University reported that the wrong patient received 18.5 MBq (0.5 mCi) of Tc-99m sulfur colloid for a gastric emptying study. The prescribed patient for the dosage did not show up at the pediatric nuclear medicine department and the dosage remained behind the shielded area in the hot laboratory. Later in the day, another patient, a two-year-old, arrived for a bone scan. A diagnostic dosage containing 220.15 MBq (5.95 mCi) of Tc-99m MDP was assayed and taken to the patient's room for injection. Difficulties were encountered with the access port for the injection. The dosage was returned to the shielded area in the hot laboratory. When the access port was ready, the technician mistakenly took the sulfur colloid dosage and injected the patient. The mistake was discovered and the physician advised administering the correct dosage. The MDP dosage was also administered to the patient. The total effective dose from both administrations was estimated to be 5.62 mSv (562 mrem).

**Event Date:** 10/03/2006**Discovery Date:** 10/03/2006**Report Date:** 10/04/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-A-01901

Name: VANDERBILT UNIVERSITY

NRC Docket Number: NA

City: NASHVILLE

NRC Program Code: NA

State: TN Zip Code: 27323

Responsible NRC Region: 1

**Site of Event:**

Site Name: NASHVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U                      Date Informed:

**Given:**

Diagnostic Study:            GASTRIC EMPTYING

Radiopharmaceutical:    SULFUR COLLOID

Radionuclide:    TC-99M                      Activity:                      0.5 mCi                      18.5 MBq

**Intended:**

Diagnostic Study:            BONE SCAN

Radiopharmaceutical:    MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed:            NA

% Dose is Less Than Prescribed:        NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material:    UNSEALED SOURCE RADIOPHARM                      Radionuclide or Voltage (kVp/MeV):    TC-99M

Manufacturer:                      NR    Activity:                                      0.0005 Ci                                      0.0185 GBq

Model Number:                      NA

Serial Number:                      NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN06124	02/27/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The University of California Davis Medical Center (UCDMC) reported that a patient received two HDR cylinder gynecological treatment fractions of 600 cGy (rad) to 5 mm past the surface of the cylinder on 1/31/2007. The patient was prescribed two fractions of 600 cGy (rad) to the surface of the cylinder. UCDMC believes that the treatment form was filled out by a resident radiation oncologist and was signed by both the attending radiation oncologist and the resident oncologist. When the radiation oncologist typed the official written directive into the Information for Management, Planning, Analysis and Coordination System (IMPAC), her intention was to treat to the surface of the cylinder. However, the treatment was planned according to the written directive to 5 mm past the surface of the cylinder. The plan was checked and signed off by the treating physician prior to administration. The radiation oncologist changed the prescription in IMPAC to reflect the dose that was administered. The treating physician has notified both the referring physician and the patient.

Event Date: 01/31/2008

Discovery Date: 02/01/2008

Report Date: 02/01/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1334-34

Name: UNIVERSITY OF CALIFORNIA DAVIS MEDICAL CENTER

NRC Docket Number: NA

City: SACRAMENTO

NRC Program Code: NA

State: CA Zip Code: 95817

Responsible NRC Region: 4

**Site of Event:**

Site Name: SACRAMENTO

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed: 02/01/2008

**Given:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, HDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: NR Activity: NR mCi NR MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, HDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: NR Activity: NR mCi NR MBq Dose: 1200 rad 12 Gy

% Dose Exceeds Prescribed: NR

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Radionuclide or Voltage (kVp/MeV): NR

Manufacturer: NR

Activity: NR Ci NR GBq

Model Number: NR

Serial Number: NR

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: REMOTE AFTERLOADER HDR

Model Number: NR

Manufacturer: NR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA1211	02/08/2008		DCH	AGREEMENT STATE EVENT REPORT
EN43960	02/11/2008		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE

**Narrative:**

The Department of Veterans Affairs (VA) reported a possible medical event involving the administration of 133.2 MBq (3.6 mCi) of F-18 FDG for a PET scan to a patient using the wrong route of administration. The incident occurred on 1/17/2007 at the VA Boston Healthcare system in West Roxbury, Massachusetts. During intravenous administration, a substantial portion of the radiopharmaceutical leaked from the injected vein and infiltrated much of the antecubital soft tissue adjacent to the left elbow. The leak was discovered during imaging one hour after the administration. Dose estimates to the tissue range from 0.2 to 96 cSv (rem). The referring physician and patient were notified. This event was caused by inaccurate placing of the intravenous needle in a very small vein. No adverse effects to the patient were observed. The incident was retracted on 3/12/2008 because infiltration is not considered to be a wrong route of administration.

Event Date: 01/17/2008

Discovery Date: 01/17/2008

Report Date: 01/18/2008

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 03-23853-01VA

Name: DEPARTMENT OF VETERANS AFFAIRS

NRC Docket Number: 03034325

City: NORTH LITTLE ROCK

NRC Program Code: 03613

State: AR Zip Code: 72114

Responsible NRC Region: 3

**Site of Event:**

Site Name: WEST ROXBURY

State: MA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed: 01/18/2008

**Given:**

Diagnostic Study: PET SCAN

Radiopharmaceutical: FDG (FLUORODEOXYGLUCOSE)

Radionuclide: F-18

Activity:

3.6 mCi

133.2 MBq

**Intended:**

Diagnostic Study: PET SCAN

Radiopharmaceutical: FDG (FLUORODEOXYGLUCOSE)

Radionuclide: F-18

Activity:

3.6 mCi

133.2 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): F-18

Manufacturer: NR

Activity:

0.0036 Ci

0.1332 GBq

Model Number: NA

Serial Number: NA

**Keywords:**

MD2

REVISED BYPRODUCT MATERIAL DEFINITION

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43917	01/24/2008	03/12/2008	DCH	EVENT NOTIFICATION
EN43917A	03/13/2008	03/12/2008	DCH	EVENT NOTIFICATION
LTR080409	04/14/2008		DCH	NRC LETTER
ML080310827	09/30/2009		RLS	LICENSEE REPORT

**Narrative:**

Charlotte Hungerford Hospital reported that 0.26 GBq (7 mCi) of Tc-99m was administered to the wrong patient on 1/3/2008. A technologist went to a waiting room and called for a patient by their first name only. An older man answered and was taken to the radiology laboratory where a second technologist administered the Tc-99m. When the patient was taken to the radiologist, the error was noticed. The unintended patient had the same first name as the scheduled patient. The unintended patient was informed of the error. The intended patient was found and administered the prescribed dose. Charlotte Hungerford Hospital plans to perform better screening of patient (using first and last names, social security number, and date of birth by both technologists) to prevent recurrence.

**Event Date:** 01/03/2008**Discovery Date:** 01/03/2008**Report Date:** 01/04/2008**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 06-08349-04

Name: CHARLOTTE HUNGERFORD HOSPITAL

NRC Docket Number: 03009293

City: TORRINGTON

NRC Program Code: 02120

State: CT Zip Code: 06790

Responsible NRC Region: 1

**Site of Event:**

Site Name: TORRINGTON

State: CT

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 01/03/2008

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: TC-99M

Activity:

7 mCi

259 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.007 Ci

0.259 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43881	01/10/2008		DCH	EVENT NOTIFICATION



**Narrative:**

A medical facility reported administering the wrong radiopharmaceutical to a patient. They stated that Cardinal Health delivered a mislabeled dose to their facility, which was labeled as containing 0.19 GBq (5.1 mCi) of Tc-99m Mertiatide (Mag-3). The patient was prescribed to have received a renal scan on 11/19/2007, but imaging revealed accumulation of material in the liver and spleen, typical of Tc-99m Sulfur Colloid. The information was relayed to Cardinal Health by the medical facility. The State of Louisiana performed an investigation of the incident.

Event Date: 11/19/2007

Discovery Date: 11/19/2007

Report Date: 12/14/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-5394-L01

Name: CARDINAL HEALTH 414

NRC Docket Number: NA

City: BATON ROUGE

NRC Program Code: NA

State: LA Zip Code: 70817

Responsible NRC Region: 4

**Site of Event:**

Site Name: BATON ROUGE

State: LA

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 11/19/2007

**Given:**

Diagnostic Study: LIVER

Radiopharmaceutical: SULFUR COLLOID

Radionuclide: TC-99M

Activity:

5.1 mCi

188.7 MBq

**Intended:**

Diagnostic Study: RENAL-TUBULAR SECRETION (MAG3)

Radiopharmaceutical: MAG3 (MERCAPTO ACETYL TRIGLYCI

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	CARDINAL HEALTH	Activity:	0.0051 Ci 0.1887 GBq
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43841	12/20/2007		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LA070030	02/14/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Saint Joseph Health Center administered diagnostic dosages to three patients that differed from the prescribed dosages by more than 20%. On 8/7/2007 and 9/5/2007, two patients were administered 1.117 GBq (30.2 mCi) of Tc-99m Medronate for bone scans instead of the prescribed 0.925 GBq (25 mCi), a difference of 20.8%. On 10/9/2007, a patient was administered 1.125 GBq (30.4 mCi) of Tc-99m Medronate for a bone scan instead of the prescribed 0.925 GBq (25 mCi), a difference of 21.6%. Corrective actions included procedure changes to require that dosages be adjusted to within 20% of the prescribed amount, personnel training, and quarterly audits.

**Event Date:** 08/07/2007**Discovery Date:** 10/15/2007**Report Date:** 10/15/2007**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 24-02704-01

Name: SAINT JOSEPH HEALTH CENTER

NRC Docket Number: 03002310

City: KANSAS CITY

NRC Program Code: 02120

State: MO Zip Code: 64114

Responsible NRC Region: 3

**Site of Event:**

Site Name: KANSAS CITY

State: MO

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 PROCEDURE MODIFIED
- 2 PERSONNEL RECEIVE IMPROVED SUPERVISION
- 3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: 30.2 mCi 1117.4 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: 30.2 mCi 1117.4 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 3**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: 30.4 mCi 1124.8 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.0302 Ci	1.1174 GBq
Model Number:	NA			
Serial Number:	NA			

**Source Number: 2**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.0302 Ci	1.1174 GBq
Model Number:	NA			
Serial Number:	NA			

**Source Number: 3**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.0304 Ci	1.1248 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML073040167	11/16/2007		RLS	INSPECTION REPORT
LTR071121	11/26/2007		DCH	NRC LETTER
ML100060294	01/07/2010		RLS	INSPECTION REPORT

**Narrative:**

The University of Iowa Hospital reported that a patient intervened during a vaginal treatment using Ir-192 brachytherapy sources. The patient removed one of the needles containing sources from her body. The needle was found by a nurse approximately 30 minutes after it had been removed by the patient. The needle was located at the foot of the bed near the patient's right ankle. The doctor directed the nurse to place the needle into a lead pig. There were six Ir-192 sources in the needle with a total activity of 0.26 GBq (7 mCi). The estimated dose to the nurse's hand was 0.13 mSv (13 mrem). The nurse's whole body dosimeter was sent for processing. The estimated dose to the patient's ankle is between 5 to 165 cSv (rem). The patient was monitored for acute radiation signs to the exposed areas of the legs and ankles. No signs of skin reaction were noted as of 12/5/2007. The patient received the intended therapeutic dose. The University will continue to monitor the patient. The incident was retracted on 1/2/2008.

**Event Date:** 10/19/2007**Discovery Date:** 10/19/2007**Report Date:** 10/19/2007**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: IA-37-1-52-AAB

Name: UNIVERSITY OF IOWA

NRC Docket Number: NA

City: IOWA CITY

NRC Program Code: NA

State: IA Zip Code: 52242

Responsible NRC Region: 3

**Site of Event:**

Site Name: IOWA CITY

State: IA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: PATIENT INTERVENTION

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: ANKLE

Radiopharmaceutical: NA

Radionuclide: IR-192 Activity: 7 mCi 259 MBq Dose: 165 rad 1.65 Gy

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: 100

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 1A**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: IR-192 Activity: 7 mCi 259 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL AFTERLOADER

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: IR-192 Activity: 7 mCi 259 MBq Dose: NR rad NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NR

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: NR

Model Number: NR

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): IR-192

Activity: 0.007 Ci 0.259 GBq

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: APPLICATOR

Manufacturer: NR

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43734	10/25/2007	01/02/2008	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
EN43734A	01/03/2008	01/02/2008	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR080104	01/08/2008		DCH	AGREEMENT STATE LETTER

**Narrative:**

Cardinal Health reported that a customer contacted them regarding a Tc-99m mertiatide prescription for renal imaging that showed no renal distribution, but instead showed only liver distribution. Cardinal Health investigated the incident and determined that the error occurred in the pharmacy. The root cause was identified as procedures not followed. All customers affected by the incident were notified. Only one patient was injected. Corrective actions taken by Cardinal Health included retraining on policy and procedures regarding compounding doses.

Event Date: 09/24/2007

Discovery Date: 09/24/2007

Report Date: 10/04/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-3385-L01

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: NEW ORLEANS

NRC Program Code: NA

State: LA Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: NEW ORLEANS

State: LA

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: LIVER

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: RENAL BLOOD FLOW

Radiopharmaceutical: MERTIATIDE

Radionuclide: TC-99M Activity: NR mCi NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2



---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	NR Ci	NR GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43731	10/25/2007		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LA070028	02/13/2008		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Signet Diagnostic Imaging Services (dba South Florida Imaging Center) reported that a patient received 3.7 MBq (100 uCi) of I-123 instead of the prescribed thyroid scan using Tc-99m. An intern student from a local school was allowed to administer the diagnostic treatment, but didn't follow protocol. Corrective actions taken by the licensee included terminating the intern's position. Also, students are prohibited from administering any radioiodine to patients.

Event Date: 08/09/2007

Discovery Date: 08/09/2007

Report Date: 08/10/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-3439-3

Name: SIGNET DIAGNOSTIC IMAGING SERVICES

NRC Docket Number: NA

City: PLANTATION

NRC Program Code: NA

State: FL Zip Code: 33322

Responsible NRC Region: 1

**Site of Event:**

Site Name: PLANTATION

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL TERMINATED

2 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 08/10/2007

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: I-123

Activity:

0.1 mCi

3.7 MBq

**Intended:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: NR

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-123

Manufacturer: NR

Activity: 0.0001 Ci

0.0037 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

FL07-119

10/23/2007

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a nuclear medicine technologist performed a diagnostic cardiac imaging exam on himself. He administered himself with 1.46 GBq (39.4 mCi) of Tc-99m myoview for a stress test and followed it up with 0.43 GBq (11.6 mCi) of Tc-99m myoview for the rest test. Both administrations occurred on 8/6/2007 and were done without the licensee's or an authorized user's knowledge or consent. The technologist used a dose intended for a patient that did not show up for their scheduled exam. An authorized user was later notified of the incident by the technologist. The North Carolina Radioactive Materials Branch will inspect the licensee. The nuclear medicine technologist's employment was terminated.

Event Date: 08/06/2007

Discovery Date: 08/07/2007

Report Date: 08/08/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: NC-014-1144-2

Name: PIEDMONT CARDIOLOGY ASSOCIATES

NRC Docket Number: NA

City: LENOIR

NRC Program Code: NA

State: NC Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: LENOIR

State: NC

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INTENTIONAL VIOLATION

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL TERMINATED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 08/06/2007

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEWS

Radionuclide: TC-99M

Activity:

51 mCi

1887 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0051 Ci 0.1887 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43557	08/13/2007		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
NC070041	09/12/2007		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

During an NRC inspection it was determined that a technologist administered doses of Tc-99m that did not fall within the prescribed range and differed from the prescribed dosage by more than 20%. Myocardial imaging may involve a rest test and a stress test. Patients receiving the rest test are to receive 296 MBq (8 mCi) of Tc-99m, while patients receiving the stress test are to receive between 555 and 925 MBq (15 and 25 mCi) of Tc-99m. As of 6/5/2007, the technologist's practice was to administer the full dosage of about 1.11 GBq (30 mCi) when only the stress portion of the test was performed. When both portions of the test were performed, the technologist split a 1.11 GBq (30 mCi) dosage into two parts with the rest portion usually exceeding 444 MBq (12 mCi).

Event Date: 06/05/2007

Discovery Date: 06/05/2007

Report Date: 06/05/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 29-30646-01

Name: REZZADEH, RUDY, M.D.

NRC Docket Number: 03035748

City: CLOSTER

NRC Program Code: 02201

State: NJ Zip Code: 07624

Responsible NRC Region: 1

**Site of Event:**

Site Name: CLOSTER

State: NJ

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: RADIOIMAGING

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: 12 mCi 444 MBq

**Intended:**

Diagnostic Study: RADIOIMAGING

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.008 Ci 0.296 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
ML071930453	07/19/2007		RLS	NOTICE OF VIOLATION
ML071930453	07/19/2007		RLS	NRC LETTER

**Narrative:**

The licensee reported that one of their customers stated that a patient prescribed to receive Tc-99m sestamibi for a heart scan showed no heart uptake. Instead, imaging revealed Tc-99m medronate (a bone imaging agent) had been injected. The customer had ordered a large dose of sestamibi and a biliary dose. Those were the only two doses drawn by the licensee at the time. No other clients that were dispensed doses from the same vial reported errors in imaging. Licensee investigation revealed no dispensing errors. The licensee has protocols in place to prevent dispensing errors. Since the error cannot be attributed to the licensee, no corrective actions are necessary.

**Event Date:** 05/16/2007**Discovery Date:** 05/16/2007**Report Date:** 06/05/2007**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-5119-L01

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: WEST MONROE

NRC Program Code: NA

State: LA Zip Code: 71201

Responsible NRC Region: 4

**Site of Event:**

Site Name: WEST MONROE

State: LA

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NO CORRECTIVE ACTION TAKEN

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**



**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: NR Ci

NR GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
EN43432	06/25/2007		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LA070015	09/10/2007		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient was administered 1.18 GBq (32 mCi) of Tc-99m MAA instead of the prescribed 1.18 GBq (32 mCi) dose of Tc-99m myoview. The licensee ordered a myoview dose from the Gadsden Nuclear Pharmacy, but received MAA, which was mislabeled on the syringe. The dose was administered to the patient and the error was discovered when the patient was scanned. Dose estimate calculations determined that the patient received 7.04 cGy (rad) to the lungs. The root cause of the error was a failure by the pharmacist to select the correct drug. The pharmacist mistakenly placed a drug vial containing MAA into the myoview vial shield. Also, the technician performing the quality control test failed to properly interpret the results. Corrective actions taken by the pharmacy included modifying procedures to better identify the vials prior to use. In addition, a protocol has been implemented to validate the radiopharmaceutical quality control tests.

**Event Date:** 10/31/2006**Discovery Date:** 10/31/2006**Report Date:** 12/22/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-1357

Name: APPLACHIAN CARDIOVASCULAR ASSOCIATES

NRC Docket Number: NA

City: FORT PAYNE

NRC Program Code: NA

State: AL Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: FORT PAYNE

State: AL

**Additional Involved Party:**

License Number: NR

Name: GADSDEN NUCLEAR PHARMACY

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed: 10/31/2006

**Given:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

Radionuclide: TC-99M Activity: 32 mCi 1184 MBq

**Intended:**

Diagnostic Study: CARDIAC

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.032 Ci 1.184 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
AL070019	05/07/2007		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Sibley Memorial Hospital reported that a patient receiving a gall bladder study was administered Ga-67 instead of the prescribed 185 MBq (5 mCi) dose of Tc-99m. Both syringes containing the doses were located in the same case, which was delivered to Sibley Memorial Hospital by Mallinckrodt. The patient was informed of the error. This event was retracted on 3/13/2007 after Sibley Memorial Hospital concluded that no reporting criteria were met.

Event Date: 03/12/2007

Discovery Date: 03/12/2007

Report Date: 03/12/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 08-07398-03

Name: SIBLEY MEMORIAL HOSPITAL

NRC Docket Number: 03014754

City: WASHINGTON

NRC Program Code: 02120

State: DC Zip Code: 20016

Responsible NRC Region: 1

**Site of Event:**

Site Name: WASHINGTON

State: DC

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 03/12/2007

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: GA-67

Activity:

NR mCi

NR MBq

**Intended:**

Diagnostic Study: GALLBLADDER

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.005 Ci	0.185 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43229	04/19/2007	03/13/2007	DCH	EVENT NOTIFICATION
ML070820340	01/07/2008		RLS	LICENSEE REPORT

**Narrative:**

The licensee reported that a patient received I-125 seed implants for treatment of prostate cancer and the resulting dose that was 6.9% greater than intended. The prescribed dose for the treatment was 14,500 cGy (rad) and the given dose was 15,500 cGy (rad). It was determined that the wrong units were entered into the dose planning computer. The incident was retracted on 3/28/2007, based on the fact that the given dose was below the reporting criteria.

Event Date: 03/23/2007

Discovery Date: 03/23/2007

Report Date: 03/23/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated:	NO	Reciprocity:	NONE
License Number:	37-11866-01	Name:	LANCASTER GENERAL HOSPITAL
NRC Docket Number:	03003151	City:	LANCASTER
NRC Program Code:	02230	State:	PA Zip Code: 17603
Responsible NRC Region:	1		

**Site of Event:**

Site Name: LANCASTER  
State: PA

**Additional Involved Party:**

License Number:	NA	Name:	NA
NRC Docket Number:	NA	City:	NA
NRC Program Code:	NA	State:	NA Zip Code: NA
Responsible NRC Region:	NA		

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	N	Investigation:	N
Atomic Energy Act Material:	Y	NMED Record Complete:	Y
Consultant Hired:	N	Event Closed by Region/State:	N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT  
Organ: PROSTATE  
Radiopharmaceutical: NA  
Radionuclide: I-125 Activity: NR mCi NR MBq Dose: 15500 rad 155 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT  
Organ: PROSTATE  
Radiopharmaceutical: NA  
Radionuclide: I-125 Activity: NR mCi NR MBq Dose: 14500 rad 145 Gy

% Dose Exceeds Prescribed: 7

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Radionuclide or Voltage (kVp/MeV): I-125

Manufacturer: NR

Activity: NR Ci

NR GBq

Model Number: NR

Serial Number: AGGREGATE

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43256	03/29/2007	03/28/2007	DCH	EVENT NOTIFICATION

**Narrative:**

Emanuel Hospital (EH) reported that a patient received 24% less dose than prescribed during treatment. A review of the event by EH and the State determined that the material involved (Pd-103) was accelerator produced and is not regulated by the NRC. Therefore, the incident is not reportable and was retracted on 3/14/2007.

Event Date: 11/01/2006

Discovery Date: 03/05/2007

Report Date: 03/05/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: OR-90014

Name: EMANUEL HOSPITAL

NRC Docket Number: NA

City: PORTLAND

NRC Program Code: NA

State: OR Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: PORTLAND

State: OR

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: N

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, TYPE NOT REPORTED

Organ: NR

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, TYPE NOT REPORTED

Organ: NR

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: NR mCi NR MBq Dose: NR rad NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 24

Effect on Patient:

**Source of Radiation:**

MD2



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**Source Number: 1**

Source/Radioactive Material:	SEALED SOURCE BRACHYTHERAPY	Radionuclide or Voltage (kVp/MeV):	PD-103	
Manufacturer:	NR	Activity:	NR Ci	NR GBq
Model Number:	NR			
Serial Number:	NR			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43214	03/12/2007	03/14/2007	DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR100908	09/14/2010		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that the wrong patient was administered 555 MBq (15 mCi) of Tc-99m Cardiolite. The patient was scheduled for a non-nuclear stress treatment. Another patient was scheduled to receive the Cardiolite administration, but failed to show up for the administration. The technologist failed to follow procedures for patient identification and mistakenly administered the dose to the wrong patient. The physician notified the patient of the error and deemed that no correction action to the patient was necessary. The technologist received additional instruction on the procedures. This event was retracted on 3/5/2007 because the patient's dose did not reach the threshold for reportability.

Event Date: 02/27/2007

Discovery Date: 02/27/2007

Report Date: 02/27/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 24-32619-01

Name: HANNIBAL CLINIC OPERATIONS, LLC

NRC Docket Number: 03037200

City: HANNIBAL

NRC Program Code: 02200

State: MO Zip Code: 63401

Responsible NRC Region: 3

**Site of Event:**

Site Name: HANNIBAL

State: MO

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 02/27/2007

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

15 mCi

555 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.015 Ci 0.555 GBq

Model Number: NR

Serial Number: NR

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43193	03/05/2007	03/05/2007	RLS	EVENT NOTIFICATION
LTR070228	03/05/2007		RLS	NRC LETTER
LTR070309	03/09/2007		RLS	NRC LETTER

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**Item Number: 070101****Last Updated: 02/26/2007****Narrative:**

The licensee reported that a patient was administered a diagnostic dose of 1.11 MBq (30 uCi) of I-123 instead of the prescribed I-131 scan. The patient had no thyroid. The licensee counseled and disciplined the involved technologist. The licensee will review their medical directive for verification.

**Event Date:** 10/06/2006**Discovery Date:** 10/06/2006**Report Date:** 10/20/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-3157-1

Name: SHANDS JACKSONVILLE MEDICAL CENTER, INC.

NRC Docket Number: NA

City: JACKSONVILLE

NRC Program Code: NA

State: FL Zip Code: 33209

Responsible NRC Region: 1

**Site of Event:**

Site Name: JACKSONVILLE

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL REPRIMANDED

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: I-123 Activity: 0.03 mCi 1.11 MBq

**Intended:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	I-123	
Manufacturer:	NR	Activity:	0.00003 Ci	0.00111 GBq
Model Number:	NA			
Serial Number:	NA			

**Source Number: 2**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	I-131	
Manufacturer:	NR	Activity:	NR Ci	NR GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
FL06-130	02/26/2007		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a 59-year-old female patient being treated for cervical cancer received 844.5 cGy (rad) to the intended area instead of the prescribed dose of 2046.5 cGy (rad). The planned dose was to be administered over a 39-hour time period using a low dose rate (LDR) [REDACTED] afterloader and nine Cs-137 sources, each with an activity of 0.62 GBq (16.7 mCi). The procedure went as planned for the first 16:09 hours, but on 2/6/2007 between 0630 and 0717 EST, the patient pulled the applicator out approximately 4 cm. The licensee calculated the dose to the incorrect vaginal sites due to the displacement of the sources. If the full dose had been delivered as prescribed, the upper vagina would have received 2926.56 cGy (rad), but actually received 1225 cGy (rad). Likewise, the lower vagina would have received 465 cGy (rad), but actually received 267 cGy (rad). The patient and the patient's doctor were notified of the event and the patient refused further treatment. This event was determined to not be a reportable medical event due to patient intervention.

Event Date: 02/06/2007

Discovery Date: 02/06/2007

Report Date: 02/06/2007

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 06-00854-03

Name: SAINT FRANCIS HOSPITAL &amp; MEDICAL CENTER

NRC Docket Number: 03001246

City: HARTFORD

NRC Program Code: 02230

State: CT Zip Code: 06105

Responsible NRC Region: 1

**Site of Event:**

Site Name: HARTFORD

State: CT

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: PATIENT INTERVENTION

Old Cause: PATIENT REMOVED SOURCE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: CERVIX

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 844.5 rad 8.445 Gy

**Intended:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: CERVIX

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 2046.5 rad 20.465 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 58.7

Effect on Patient:

**Patient Number: 1A**

Patient Informed: Y Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 1225 rad 12.25 Gy

**Intended:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 2926.6 rad 29.266 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 58.1

Effect on Patient:

**Patient Number: 1B**

Patient Informed: Y Date Informed:

**Given:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 267 rad 2.67 Gy

**Intended:**

Therapeutic Procedure: BRACHY, REMOTE AFTERLOADER, LDR

Organ: VAGINA

Radiopharmaceutical: NA

Radionuclide: CS-137 Activity: 150.3 mCi 5561.1 MBq Dose: 465 rad 4.65 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 42.6

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	SEALED SOURCE BRACHYTHERAPY	Radionuclide or Voltage (kVp/MeV):	CS-137
Manufacturer:	NR	Activity:	150.3 Ci 5561.1 GBq
Model Number:	NR		
Serial Number:	AGGREGATE		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	REMOTE AFTERLOADER LDR
Manufacturer:	

Model Number:

Serial Number:

NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN43147	02/12/2007	03/07/2007	DCH	EVENT NOTIFICATION
LTR070305	03/05/2007		RLS	NRC LETTER
ML071010378	04/30/2007		RLS	LICENSEE REPORT
ML071010378	04/30/2007		RLS	REGION REPORT



**Narrative:**

The licensee reported that a patient receiving treatment for liver cancer using Y-90 microspheres was administered 0.24 GBq (6.5 mCi) instead of the prescribed 0.36 GBq (9.8 mCi). This resulted in the patient receiving 5,900 cGy (rad) to the left lobe of the liver rather than 10,000 cGy (rad). The licensee was using Y-90 SirTex Sirspheres and an intrahepatic catheter. Approximately half-way through the administration, the physician temporarily halted the procedure in order to flush the catheter and to verify positioning of the administered microspheres using angiography. As the physician attempted to inject the contrast media for the angiography, he noted resistance and slow flow, indicating that the patient's vasculature within the tumor could not accommodate additional microspheres. The physician elected to terminate the procedure and revised the written directive. As the physician halted treatment, the remaining microspheres in the delivery device and the catheter appeared to be clumped together. The licensee was unable to determine if the clumping of the microspheres contributed to this event. The licensee sent the delivery device to the manufacturer for examination. This event was retracted on 1/11/2007 after discussions with NRC Region III determined that this event did not meet the criteria for a reportable event because the physician terminated the procedure due to the medical condition of the patient.

Event Date: 11/07/2006

Discovery Date: 11/07/2006

Report Date: 11/08/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 21-01333-01

Name: WILLIAM BEAUMONT HOSPITAL

NRC Docket Number: 03002006

City: ROYAL OAK

NRC Program Code: 02110

State: MI Zip Code: 48073

Responsible NRC Region: 3

**Site of Event:**

Site Name: ROYAL OAK

State: MI

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: PATIENT OTHER

Old Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 EQUIPMENT RETURNED TO MANUFACTURER FOR REPAIR OR DISPOSAL

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed: 11/09/2006

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: LIVER

Radiopharmaceutical: NA

Radionuclide: Y-90      Activity: 6.5 mCi      240.5 MBq      Dose: 59 rad      0.59 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: LIVER

Radiopharmaceutical: NA

Radionuclide: Y-90      Activity: 9.8 mCi      362.6 MBq      Dose: 100 rad      1 Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 41

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: MICROSPHERES

Manufacturer: SIRTEX MEDICAL

Model Number: SIR-SPHERES

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): Y-90

Activity: 0.098 Ci      3.626 GBq

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: APPLICATOR

Manufacturer: SIRTEX MEDICAL

Model Number: SIR-SPHERES

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42975	11/13/2006	01/11/2007	DCH	EVENT NOTIFICATION
ML063250105	12/05/2006		RLS	LICENSEE REPORT
LTR070116	01/18/2007		DCH	NRC LETTER
ML070160142	01/26/2007		RLS	NRC LETTER
ML070160316	01/26/2007		RLS	INSPECTION REPORT

**Narrative:**

The licensee (dba Cardiology Associates) reported that a patient was administered 1.11 GBq (30 mCi) of Tc-99m myoview. However, imaging of the patient revealed the lungs and liver. The licensee believes that the dose contained Tc-99m MAA instead of the prescribed Tc-99m myoview. Cox Nuclear Pharmacy was contacted, but they do not believe the bottle was mislabeled. They stated that the bottle was filled strictly within their procedures. They also stated that the company that provides myoview says that under certain circumstances it can show up in the lungs and liver.

**Event Date:** 07/03/2006**Discovery Date:** 07/03/2006**Report Date:** 07/24/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-1815-1

Name: ECONIFINA CARDIOLOGY ASSOCIATES

NRC Docket Number: NA

City: PANAMA CITY

NRC Program Code: NA

State: FL Zip Code: 32401

Responsible NRC Region: 1

**Site of Event:**

Site Name: PANAMA CITY

State: FL

**Additional Involved Party:**

License Number: NR

Name: COX NUCLEAR PHARMACY

NRC Docket Number: NR

City: PANAMA CITY

NRC Program Code: NR

State: FL Zip Code: 32401

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

Old Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 07/03/2006

**Given:**

Diagnostic Study: LUNG

Radiopharmaceutical: MAA/PULMOLITE (MACROAGGREGATED

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

**Intended:**

Diagnostic Study: CARDIAC

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.03 Ci

1.11 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

FL06-094

08/30/2006

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported administering a gamma knife treatment to the incorrect area of the patient. The physician treated the wrong Trigeminal nerve. Follow up inspection determined that the licensee treated the area prescribed by the physician and followed the written directive. The incident occurred due to an error in the physician's notes that lead to the incorrect site being treated. Partially into the treatment, the possibility of the site being incorrect was addressed by a member of the treatment team. The treatment was immediately terminated. Investigation determined that the patient received 3,200 cGy (rad) to the wrong site. The physician and patient were informed. The physician and patient made the decision to treat the correct site. The patient then received the treatment to the correct site per a new prescription and written directive. Corrective actions taken by the licensee included requiring three separate double checks of their procedure on the day of treatment. Prior to being sedated, the patient will be asked which side the pain is on. When the patient is framed, the nurse shall ask the neurosurgeon which side is to be treated. That will be verified with the patient. Lastly, just prior to treatment, both the neurosurgeon and the radiation oncologist will be once again asked which side is to be treated on the patient.

**Event Date:** 10/03/2005**Discovery Date:** 10/03/2005**Report Date:** 08/23/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: OR-90946

Name: PROVIDENCE PORTLAND MEDICAL CENTER

NRC Docket Number: NA

City: PORTLAND

NRC Program Code: NA

State: OR Zip Code: NR

Responsible NRC Region: 4

**Site of Event:**

Site Name: PORTLAND

State: OR

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: FAILURE TO VERIFY TREATMENT SITE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 10/03/2005

**Given:**

Therapeutic Procedure: GAMMA KNIFE

Organ: HEAD

Radiopharmaceutical: NA

Radionuclide: CO-60      Activity:      NR mCi      NR MBq      Dose:      3200 rad      32 Gy

**Intended:**

Therapeutic Procedure: GAMMA KNIFE

Organ: HEAD

Radiopharmaceutical: NA

Radionuclide: CO-60      Activity:      NR mCi      NR MBq      Dose:      0 rad      0 Gy

% Dose Exceeds Prescribed: 100

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE GAMMA KNIFE

Radionuclide or Voltage (kVp/MeV): CO-60

Manufacturer: NR

Activity:      NR Ci      NR GBq

Model Number: NR

Serial Number: NR

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: GAMMA KNIFE UNIT

Model Number: NR

Manufacturer: NR

Serial Number: NR

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42798	08/28/2006		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR060830	09/07/2006		DCH	AGREEMENT STATE LETTER
LTR060830A	09/07/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

Fort Sanders Parkwest Hospital reported that a patient was injected with Tc-99m sestamibi for myocardial uptake instead of the intended Tc-99m medronate for bone imaging. The Cardinal Health pharmacist failed to select the correct drug for the prescription. Additionally, both the pharmacist and the dispensing technician failed to verify that the drug vial matched the prescription label prior to dispensing the dose. An inservice training session was held for all pharmacists and technicians at Cardinal Health to remind them of the proper procedures for sorting prescriptions and drawing doses.

Event Date: 05/09/2006

Discovery Date: 05/09/2006

Report Date: 06/02/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47080

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37921

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NR

Name: FORT SANDERS PARKWEST HOSPITAL

NRC Docket Number: NR

City: KNOXVILLE

NRC Program Code: NR

State: TN Zip Code: 37916

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: RADIOPHARMACEUTICAL IMPROPERLY LABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: MYOCARDIAL PERFUSION

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: NR Ci

NR GBq

Model Number: NA

Serial Number: NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
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TN06069	07/19/2006		DCH	AGREEMENT STATE EVENT REPORT
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TN06069A	02/21/2008		DCH	AGREEMENT STATE EVENT REPORT
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**Narrative:**

The licensee reported that a patient was injected with 0.37 GBq (10 mCi) of Tc-99m sestamibi instead of the intended Tl-201 for a stress study. The order was sent for the wrong patient. The patient and the patient's physician were notified of the incident. The licensee implemented a procedure for all radionuclide injections to require two individuals (the nuclear cardiology technician and either a nuclear cardiology nurse or the manager) to verify the correct patient and dosage.

Event Date: 04/04/2006

Discovery Date: 04/04/2006

Report Date: 04/13/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-19112

Name: CENTENNIAL MEDICAL CENTER

NRC Docket Number: NA

City: NASHVILLE

NRC Program Code: NA

State: TN Zip Code: 37203

Responsible NRC Region: 1

**Site of Event:**

Site Name: NASHVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG PATIENT SELECTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 04/04/2006

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

10 mCi

370 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: THALLOUS CHLORIDE

Radionuclide: TL-201

Activity:

NR mCi

NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.01 Ci

0.37 GBq

Model Number: NA

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

TN06052

07/18/2006

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient was injected with Tc-99m choletec for a hepatobiliary study instead of the intended Tc-99m MAG-3 for a renal study. The licensee ordered the MAG-3 dose, but the scan revealed a hepatobiliary uptake. An investigation revealed that the dose was mistakenly dispensed as choletec. The prescription label for the MAG-3 dose was printed out and placed on a counter. A vial of choletec was mistakenly placed on the label, which a pharmacist signed, indicating his verification of proper drug selection. The dispensing technician then used this vial to fill the dose which was sent to the customer. The root cause of the event was the drug selection error. Both the pharmacist and the technician failed in their duty to verify that the drug vial matched the prescription label prior to dispensing the dose. Three changes were made in the licensee's dispensing procedure to prevent recurrence. All technicians will now perform a second verification step for the prescriptions they will be filling; only pharmacists will be allowed to remove kits from the kit storage area; and only pharmacists will be placing kits on the prescription labels. The licensee converted to a new numbering system for drug kits to further help avoid drug selection errors. The pharmacist and dispensing technician were given written warnings.

**Event Date:** 01/16/2006**Discovery Date:** 02/06/2006**Report Date:** 02/06/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47080

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37921

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG VIAL SELECTED WHEN DRAWING DOSE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL REPRIMANDED

**Patient Information:**

---

**Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: HEPATOBILIARY

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

**Intended:**

Diagnostic Study: RENAL BLOOD FLOW

Radiopharmaceutical: MAG3 (MERCAPTO ACETYL TRIGLYCI

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity:

NR Ci

NR GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

TN06022

**Entry Date:**

07/18/2006

**Retraction Date:**

**Coder Initials:**

DCH

**Reference Type:**

AGREEMENT STATE EVENT REPORT

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**Item Number: 060451****Last Updated: 07/17/2006****Narrative:**

The licensee reported that a patient who was not scheduled to receive any radioactive material received 0.93 GBq (25 mCi) of Tc-99m medronate . The technician failed to follow protocol and did not check the patient's name and birth date. The licensee stated that patients need to wear arm tags and the technician needs to verify the proper patient has been presented.

**Event Date:** 01/17/2006**Discovery Date:** 01/17/2006**Report Date:** 01/24/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-79104

Name: SAINT FRANCIS HOSPITAL

NRC Docket Number: NA

City: MEMPHIS

NRC Program Code: NA

State: TN Zip Code: 38119

Responsible NRC Region: 1

**Site of Event:**

Site Name: MEMPHIS

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: WRONG PATIENT SELECTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: Y

Date Informed: 01/17/2006

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MEDRONATE

Radionuclide: TC-99M

Activity:

25 mCi

925 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.025 Ci	0.925 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN06011	07/17/2006		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

Deka b Baptist Medical Center reported that a patient received the wrong radiopharmaceutical. The Medical Center ordered a 185 MBq (5 mCi) Tc-99m choletec dose from the licensee. The dose received was labeled as choletec, but when administered to the patient, the resulting scan primarily showed uptake by the kidneys. An investigation by the licensee revealed that the dose was mistakenly dispensed as Tc-99m MAG-3. The root cause was determined to be a failure of the pharmacist to properly select the drug for the dose in question. The licensee has many extra verification steps to be performed prior to dispensing, which must have also been skipped or performed incorrectly. Corrective actions taken by the licensee included holding an in-service meeting and adding an additional dispensing process to ensure further accuracy.

Event Date: 05/11/2006

Discovery Date: 05/11/2006

Report Date: 05/27/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-1168

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: BIRMINGHAM

NRC Program Code: NA

State: AL Zip Code: 35233

Responsible NRC Region: 1

**Site of Event:**

Site Name: BIRMINGHAM

State: AL

**Additional Involved Party:**

License Number: NR

Name: DEKALB BAPTIST MEDICAL CENTER

NRC Docket Number: NR

City: FORT PAYNE

NRC Program Code: NR

State: AL Zip Code: NR

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 05/11/2006

**Given:**

Diagnostic Study: RENAL-TUBULAR SECRETION (MAG3)

Radiopharmaceutical: MAG3 (MERCAPTO ACETYL TRIGLYCI

Radionuclide: TC-99M

Activity:

5 mCi

185 MBq

**Intended:**

Diagnostic Study: HEPATOBILIARY

Radiopharmaceutical: MEBROFENIN/CHOLETECH

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.005 Ci

0.185 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

AL060024

06/16/2006

DCH

AGREEMENT STATE EVENT REPORT



**Narrative:**

The licensee reported that a 64-year-old male outpatient received an 81.4 MBq (2.2 mCi) dose of I-131 instead of the intended 3.7 MBq (100 uCi) dose. The patient's referring physician ordered a thyroid scan to evaluate an enlarged thyroid lobe. The licensee's protocol is to administer 3.7 MBq (100 uCi) of I-131 to a patient with an intact thyroid gland. However, the licensee's central scheduling staff modified the written order to indicate that the patient should receive a metastatic thyroid scan, implying that the patient did not have an intact thyroid. The licensee's protocol for a metastatic scan requires the administration of 74 MBq (2 mCi) of I-131. So, the written order conflicted with the patient's symptoms as indicated on the order (a metastatic thyroid scan for an enlarged lobe). Licensee personnel failed to question the conflict and administered 81.4 MBq (2.2 mCi) of I-131 to the patient on 6/12/2006. The patient returned on 6/14/2006 for a whole body scan, which indicated an intact thyroid gland with significant I-131 uptake and resulted in the discovery that the patient had received the wrong procedure. The estimated dose to the patient's thyroid was 3,300 cSv (rem). The licensee concluded that this event would not result in adverse health consequences for the patient. The root cause of this event was human error involving the failure to verify the status of the patient's thyroid prior to the administration. Corrective actions included personnel retraining and procedure modification to include verification that a patient's thyroid has been removed whenever a metastatic thyroid scan is ordered. An NRC inspection concluded that no medical event occurred because the licensee followed their protocol for the type of exam that had been scheduled and the written directive was followed.

**Event Date:** 06/12/2006**Discovery Date:** 06/14/2006**Report Date:** 06/14/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 21-01354-04

Name: BATTLE CREEK HEALTH SYSTEM

NRC Docket Number: 03013899

City: BATTLE CREEK

NRC Program Code: 02120

State: MI Zip Code: 49016

Responsible NRC Region: 3

**Site of Event:**

Site Name: BATTLE CREEK

State: MI

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: RADIOPHARMACEUTICAL OR DOSE ORDER MISUNDERSTOOD

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 PERSONNEL RECEIVED ADDITIONAL TRAINING
- 2 PROCEDURE MODIFIED

**Patient Information:**

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**Patient Number: 1**

Patient Informed: Y

Date Informed:

**Given:**

Therapeutic Procedure: SODIUM IODIDE - T

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131      Activity: 2.2 mCi      81.4 MBq      Dose: 3300 rad      33 Gy

**Intended:**

Therapeutic Procedure: SODIUM IODIDE - T

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131      Activity: 0.1 mCi      3.7 MBq      Dose: NR rad      NR Gy

% Dose Exceeds Prescribed: 2100

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR

Activity: 0.0022 Ci      0.0814 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42639	06/15/2006		DCH	EVENT NOTIFICATION
LTR060724	07/31/2006		RLS	NRC LETTER
ML061990623	07/31/2006		RLS	INSPECTION REPORT
ML061990623	07/31/2006		RLS	NRC LETTER
ML062340380	09/20/2006		RLS	LICENSEE REPORT
ML062550235	09/20/2006		RLS	NRC LETTER
ML062550264	09/20/2006		RLS	ADAMS DOCUMENT PACKAGE
ML071580957	06/11/2007		RLS	INSPECTION REPORT

**Narrative:**

The licensee reported administering a dose that was 4% higher than the prescribed dose during a brachytherapy prostate treatment. The intent was to deliver a 14,500 cGy (rad) dose using permanently implanted I-125 seeds (Best model 2301). The licensee ordered seeds with an activity of 12.58 MBq (0.34 mCi) per seed. A computer was used to determine the number of seeds needed to deliver the intended dose based on the activity per seed. The staff incorrectly entered the activity per seed as "0.34 U" rather than "0.34 mCi". The symbol U is for air-kerma strength. Therefore, the computer calculated the seed activity as 9.92 MBq (0.268 mCi) instead of 12.58 MBq (0.34 mCi), a difference of 27%. As a result, the computer calculated a quantity of 100 seeds to be used. The error in the calculation was not discovered until after the implant was performed. Although the implanted source activity was 27% higher than intended, calculations based on a post-implant dosimetry CT scan showed a D90 (the minimum dose received by 90% of the prostate volume) of 15,077 cGy (rad), which is 104% of the prescribed dose. The NRC contracted a medical consultant, who determined that no significant impact is expected as a result of this event. The licensee performed an audit of recent prostate implant cases and identified one other event that occurred on 5/30/2006 involving accelerator-produced Pd-103. This event was reported to the State of Delaware. To prevent recurrence, the licensee modified procedures to verify the correct radionuclide and source strength.

Event Date: 06/12/2006

Discovery Date: 06/12/2006

Report Date: 06/12/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 07-14850-01

Name: BAYHEALTH MEDICAL CENTER

NRC Docket Number: 03007565

City: DOVER

NRC Program Code: 02120

State: DE Zip Code: 19901

Responsible NRC Region: 1

**Site of Event:**

Site Name: DOVER

State: DE

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: Y

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: COMPUTER TREATMENT PLANNING SOFTWARE ERROR

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 06/12/2006

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125      Activity: 34 mCi      1258 MBq      Dose: 15077 rad      150.77 Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125      Activity: 26.8 mCi      991.6 MBq      Dose: 14500 rad      145 Gy

% Dose Exceeds Prescribed: 4

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Radionuclide or Voltage (kVp/MeV): I-125

Manufacturer: BEST INDUSTRIES

Activity: 0.034 Ci      1.258 GBq

Model Number: 2301

Serial Number: AGGREGATE

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42634	06/13/2006		DCH	EVENT NOTIFICATION
ML061720263	08/10/2006		RLS	LICENSEE REPORT
ML061720263	08/10/2006		RLS	OTHER
ML062220095	08/22/2006		RLS	INSPECTION REPORT
ML062220095	08/22/2006		RLS	NOTICE OF VIOLATION
ML062220095	08/22/2006		RLS	NRC LETTER
LTR061026	10/31/2006		DCH	NRC LETTER
ML062130112	06/04/2007		DCH	LICENSEE REPORT
ML062130112	06/04/2007		DCH	REGION REPORT

**Narrative:**

The licensee reported that a patient received 0.15 GBq (4 mCi) of Tl-201 instead of the prescribed dose of Tc-99m pertechnetate. The administration resulted in a whole body dose of 5.2 cSv (rem). The patient, authorized user, and referring physician were notified of the error and the correct radiopharmaceutical was administered. The licensee's RSO conducted an investigation and interviewed persons involved with the administration. The cause of the incident was identified as inattention to labeling on the part of the technician. Remedial instruction was given to the technician. The State of New Hampshire is tracking the event as number NH060001.

**Event Date:** 03/03/2006**Discovery Date:** 03/03/2006**Report Date:** 03/07/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: NH-130R

Name: MARY HITCHCOCK MEMORIAL HOSPITAL

NRC Docket Number: NA

City: LEBANON

NRC Program Code: NA

State: NH Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: LEBANON

State: NH

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: THALLOUS CHLORIDE

Radionuclide: TL-201 Activity: 4 mCi 148 MBq

**Intended:**

Diagnostic Study: NR

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

Radionuclide: TC-99M Activity: NR mCi NR MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

---

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TL-201

Manufacturer: NR

Activity: 0.004 Ci

0.148 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number:** 1

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42440	03/27/2006		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR060713	07/13/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a technician at Saint Francis North Hospital informed them that a scan on a patient had shown lung imaging instead of the expected cardiac imaging. An investigation revealed that the hospital's myoview dose for cardiac imaging had mistakenly been dispensed as a 0.37 GBq (10 mCi) Tc-99m MAA dose, which is for lung imaging. The cause of the event was determined to be the failure by the dispensing pharmacist to follow proper licensee compounding procedures. The pharmacist pulled the wrong kit from the refrigerator. The pharmacist performed a QC test on the dose, but failed to label the starting point on the QC chromatography strip, which led to a misinterpretation of the failing test as a passing test. In order to prevent a recurrence of this event, the licensee is going to begin requiring all employees performing QC tests to label the starting point of all QC strips. Also, the licensee is planning to switch brands of MAA since the Drax MAA vials and the myoview vials are identical in appearance.

Event Date: 03/05/2006

Discovery Date: 03/05/2006

Report Date: 03/07/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-5119-L01

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: WEST MONROE

NRC Program Code: NA

State: LA Zip Code: 71292

Responsible NRC Region: 4

**Site of Event:**

Site Name: MONROE

State: LA

**Additional Involved Party:**

License Number: NR

Name: SAINT FRANCIS NORTH HOSPITAL

NRC Docket Number: NR

City: MONROE

NRC Program Code: NR

State: LA Zip Code: 71201

Responsible NRC Region: 4

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 03/05/2006

**Given:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

Radionuclide: TC-99M      Activity: 10 mCi      370 MBq

**Intended:**

Diagnostic Study: CARDIAC

Radiopharmaceutical: MYOVUE

Radionuclide: TC-99M      Activity: 10 mCi      370 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.01 Ci      0.37 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42418	03/20/2006		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR060515	05/15/2006		DCH	AGREEMENT STATE LETTER
LA060003	07/25/2006		DCH	AGREEMENT STATE EVENT REPORT
LTR060901	09/08/2006		DCH	AGREEMENT STATE LETTER



**Narrative:**

The licensee initially reported that a patient scheduled to receive 0.15 GBq (4 mCi) of I-131 for a whole body scan received a therapy dose of 7.4 GBq (200 mCi) of I-131. It was later determined that the patient had received the scheduled 0.15 GBq (4 mCi) of I-131 for a whole body scan. The patient returned to the licensee's facility on 1/16/2006 and was scanned. The board certified nuclear medicine physician assigned to the case as the authorized user reviewed the scan and, using his professional judgment, determined that a therapy dose was medically indicated. The authorized user generated a written directive, obtained a dose of 7.4 GBq (200 mCi) of I-131, and administered it to the patient on 1/16/2006. During the licensee investigation, the RSO obtained copies of documents that verified this dose was ordered and administered in full compliance with regulations and conditions. Unfortunately, the referring physician was not consulted before the therapy dose was administered. Upon learning that the therapy dose had been administered, the referring physician assumed that the therapy dose had been administered instead of the whole body scan dose and mistakenly reported that a medical event had occurred.

**Event Date:** 01/16/2006**Discovery Date:** 02/02/2006**Report Date:** 02/03/2006**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: SC-0080

Name: MEDICAL UNIVERSITY OF SOUTH CAROLINA

NRC Docket Number: NA

City: CHARLESTON

NRC Program Code: NA

State: SC Zip Code: 29425

Responsible NRC Region: 1

**Site of Event:**

Site Name: CHARLESTON

State: SC

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: COMMUNICATION PROBLEM

Old Cause: REFERRING PHYSICIAN'S REQUEST MISUNDERSTOOD

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NO CORRECTIVE ACTION TAKEN

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed:

**Given:**

Therapeutic Procedure: SODIUM IODIDE - T

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131      Activity: 200 mCi      7400 MBq      Dose: NR rad      NR Gy

**Intended:**

Therapeutic Procedure: SODIUM IODIDE - T

Organ: THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131      Activity: 200 mCi      7400 MBq      Dose: NR rad      NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR

Activity: 0.2 Ci      7.4 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42306	02/08/2006		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
SC060003	02/23/2006		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient was administered 151.7 MBq (4.1 mCi) of I-131 for a diagnostic whole body scan without a written directive. The patient had a physician's order to perform the scan, but the technologists over-looked the fact that there was no written directive. The patient received the correct dose of I-131 for his scan. Corrective actions included re-training all nuclear medicine technologists on the requirement to have a signed written directive prior to ordering or administering I-131. The event was retracted on 1/19/2006 based on discussions with NRC personnel because this event did not meet the criteria for a medical event.

Event Date: 01/11/2006

Discovery Date: 01/11/2006

Report Date: 01/12/2006

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 06-02388-01

Name: NEW BRITAIN GENERAL HOSPITAL

NRC Docket Number: 03001250

City: NEW BRITAIN

NRC Program Code: 02230

State: CT Zip Code: 06050

Responsible NRC Region: 1

**Site of Event:**

Site Name: NEW BRITAIN

State: CT

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: WHOLE BODY I-131/THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131 Activity: 4.1 mCi 151.7 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	I-131	
Manufacturer:	NR	Activity:	0.0041 Ci	0.1517 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN42253	01/13/2006	01/19/2006	DCH	EVENT NOTIFICATION
LTR040603	01/16/2006		DCH	NRC LETTER
ML070820100	03/26/2007		RLS	INSPECTION REPORT
ML070820070	04/06/2007		RLS	ADAMS DOCUMENT PACKAGE
ML070860843	04/06/2007		RLS	LICENSEE REPORT

**Narrative:**

The licensee reported dispensing a dose of Tc-99m MAG3 that was labeled as Tc-99m MAA to Huntsville Hospital. A patient that was scheduled for a lung scan was administered the MAG3 dose. When scanned, the technologist noticed little lung uptake, but did notice some uptake in the lung and stomach. Investigation determined that the licensee pharmacist had incorrectly placed a MAG3 vial in a MAA labeled vial shield, causing the error. Once the error was discovered, other customers who received doses from the same vial were notified and advised to discard the doses.

**Event Date:** 09/02/2005**Discovery Date:** 09/02/2005**Report Date:** 10/08/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-1068

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: HUNTSVILLE

NRC Program Code: NA

State: AL Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: HUNTSVILLE

State: AL

**Additional Involved Party:**

License Number: NR

Name: HUNTSVILLE HOSPITAL

NRC Docket Number: NR

City: HUNTSVILLE

NRC Program Code: NR

State: AL Zip Code: NR

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

2 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 09/02/2005

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: MAG3 (MERCAPTO ACETYL TRIGLYCI

Radionuclide: TC-99m

Activity: NR mCi

NR MBq

**Intended:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: NR Ci

NR GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

AL050056

12/06/2005

DCH

AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that the wrong patient received 0.37 GBq (10 mCi) of Tc-99m cardiolite. The patient prescribed to receive the cardiac stress test was in the waiting room with another patient that had the same last name and a rhyming first name. The intended patient's name was called and the wrong patient answered the call. The patient's name and date of birth were not verified prior to administration. The individual was notified as soon as it was realized. Licensee staff will verify the patient's name and date of birth prior to administration.

Event Date: 04/06/2005

Discovery Date: 04/06/2005

Report Date: 04/06/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-57032

Name: THE JACKSON CLINIC

NRC Docket Number: NA

City: JACKSON

NRC Program Code: NA

State: TN Zip Code: 38301

Responsible NRC Region: 1

**Site of Event:**

Site Name: JACKSON

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: WRONG PATIENT SELECTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 04/06/2005

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

10 mCi

370 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.01 Ci

0.37 GBq

Model Number: NA

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

TN05040

10/25/2005

DCH

AGREEMENT STATE EVENT REPORT



**Narrative:**

The licensee reported that a patient scheduled for a renal ultrasound was administered 925 MBq (25 mCi) of Tc-99m MDP for a bone scan. The technician approached the patient, stated a name, and asked the patient if that was his name. The patient responded affirmatively and was injected with the radiopharmaceutical. It was later learned that the intended recipient of the dose was a woman. With the permission of his primary care physician, the administered patient received the bone scan. This event was caused by the technician's assumption that the intended patient was a man and the failure to follow patient identification procedures. To prevent recurrence, the licensee retrained applicable personnel on patient identification procedures.

Event Date: 07/08/2005

Discovery Date: 07/08/2005

Report Date: 07/08/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 44-19050-01

Name: PORTER MEDICAL CENTER, INC.

NRC Docket Number: 03015288

City: MIDDLEBURY

NRC Program Code: 02120

State: VT Zip Code: 05753

Responsible NRC Region: 1

**Site of Event:**

Site Name: MIDDLEBURY

State: VT

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 07/08/2005

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity: 25 mCi

925 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.025 Ci

0.925 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
LTR050921	10/04/2005		RLS	NRC LETTER
ML052160342	10/04/2005		RLS	LICENSEE REPORT
ML052160342	10/04/2005		RLS	REGION REPORT

**Narrative:**

The licensee reported that a patient scheduled for a routine stress test without the use of radioactive material was administered 0.93 GBq (25 mCi) of Tc-99m myoview. The technologist misread the order thinking the physician ordered a stress cardiac perfusion scan. The technologist was retrained on the correct method of interpreting orders to prevent future occurrences. The physician and patient were notified.

Event Date: 08/16/2005

Discovery Date: 08/16/2005

Report Date: 08/16/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47010

Name: SAINT MARY'S MEDICAL CENTER, INC.

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37917

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 08/04/2005

**Given:**

Diagnostic Study: CARDIAC PERFUSION

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M

Activity:

25 mCi

925 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.025 Ci 0.925 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN05093	10/03/2005		DCH	AGREEMENT STATE EVENT REPORT
TN05093A	10/26/2005		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient prescribed to receive 0.3 GBq (8 mCi) of Tc-99m pertechnetate was administered 0.26 GBq (7 mCi) of Tc-99m MAA. The physicians were notified of the event. All staff was counseled regarding the incident and proper measures have been reviewed by the individuals to ensure that the radiopharmaceutical labels are properly read by the staff and that they are certain of the procedure prior to administration. The correct diagnostic study was completed.

Event Date: 05/29/2005

Discovery Date: 05/29/2005

Report Date: 05/29/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated:	YS	Reciprocity:	NONE
License Number:	TN-R-79009	Name:	METHODIST HEALTHCARE UNIVERSITY HOSPITAL
NRC Docket Number:	NA	City:	MEMPHIS
NRC Program Code:	NA	State:	TN Zip Code: 38104
Responsible NRC Region:	1		

**Site of Event:**

Site Name: MEMPHIS  
State: TN

**Additional Involved Party:**

License Number:	NA	Name:	NA
NRC Docket Number:	NA	City:	NA
NRC Program Code:	NA	State:	NA Zip Code: NA
Responsible NRC Region:	NA		

**Other Information:**

NRC Reportable Event:	N	Abnormal Occurrence:	N
Agreement State Reportable Event:	Y	Investigation:	N
Atomic Energy Act Material:	Y	NMED Record Complete:	Y
Consultant Hired:	N	Event Closed by Region/State:	Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR  
Old Cause: RADIOPHARMACEUTICAL OR DOSE ORDER MISUNDERSTOOD

**Corrective Actions Information:**

Action Number: Corrective Action:  
MD2  
1 PERSONNEL RECEIVE NEW TRAINING

**Patient Information:**

**Patient Number:** 1  
Patient Informed: N Date Informed:

**Given:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)  
Radionuclide: TC-99M Activity: 7 mCi 259 MBq

**Intended:**

Diagnostic Study: GASTROINTESTINAL SYSTEM

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

% Dose Exceeds Prescribed: NA  
% Dose is Less Than Prescribed: NA  
Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.007 Ci	0.259 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
TN05065	10/03/2005		DCH	AGREEMENT STATE EVENT REPORT
TN05065A	10/26/2005		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported distributing three improperly tagged doses of Tc-99m myoview, each containing an activity of 1.11 GBq (30 mCi), to Knoxville Cardiovascular. The doses were administered to three patients and upon interpreting the results of the scans, it was determined that the distribution within the body was not to the intended target organs. The remainder of the doses delivered to Knoxville Cardiovascular were returned to the licensee. The licensee determined that the tagging was not proper and was only in the range of 10%. The QA of the batch documented a 95% tag. The root cause was a compounding error made by the pharmacist. The licensee is now including a thorough vial inspection and permanent labeling of compounding kits. The QC procedure for myoview kits has been reevaluated. All licensee personnel have been notified of the new procedures.

Event Date: 04/29/2005

Discovery Date: 05/06/2005

Report Date: 05/06/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: TN-R-47080

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: KNOXVILLE

NRC Program Code: NA

State: TN Zip Code: 37921

Responsible NRC Region: 1

**Site of Event:**

Site Name: KNOXVILLE

State: TN

**Additional Involved Party:**

License Number: NR

Name: KNOXVILLE CARDIOVASCULAR

NRC Docket Number: NR

City: KNOXVILLE

NRC Program Code: NR

State: TN Zip Code: NR

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG REAGENT KIT RECONSTITUTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 NEW QUALITY MANAGEMENT PLAN
- 2 PROCEDURE MODIFIED
- 3 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

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**Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 3**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: 30 mCi 1110 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2



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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.03 Ci	1.11 GBq
Model Number:	NA			
Serial Number:	NA			

**Source Number: 2**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.03 Ci	1.11 GBq
Model Number:	NA			
Serial Number:	NA			

**Source Number: 3**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.03 Ci	1.11 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
TN05055	09/28/2005		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The University of Alabama reported that a patient received 0.51 GBq (13.9 mCi) of Tc-99m Choletec instead of the intended 0.51 GBq (13.9 mCi) of Tc-99m Cardiolite. One hour after injection, no heart image showed up on the patient scan, only a liver image. The licensee was contacted and advised of the incident. The licensee's investigation concluded that a mistake was made by the pharmacist and the wrong radiopharmaceutical was dispensed (a Choletec dose was labeled as Cardiolite). Corrective actions taken by the licensee included modifying procedures.

**Event Date:** 08/02/2005**Discovery Date:** 08/02/2005**Report Date:** 08/02/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-1399

Name: BIRMINGHAM NUCLEAR PHARMACY

NRC Docket Number: NA

City: BIRMINGHAM

NRC Program Code: NA

State: AL Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: BIRMINGHAM

State: AL

**Additional Involved Party:**

License Number: AL-0266

Name: UNIVERSITY OF ALABAMA

NRC Docket Number: NA

City: BIRMINGHAM

NRC Program Code: NA

State: AL Zip Code: 35294

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: Y Date Informed:

**Given:**

Diagnostic Study: HEPATOBILIARY

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M Activity: 13.9 mCi 514.3 MBq

**Intended:**

Diagnostic Study: CARDIAC PERFUSION

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

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MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0139 Ci 0.5143 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number:** 1

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
AL050043	09/06/2005		DCH	AGREEMENT STATE EVENT REPORT

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**Item Number: 050548****Last Updated: 09/19/2005****Narrative:**

The licensee reported that a patient received 223.9 MBq (6.05 mCi) of I-131 for a thyroid scan instead of the intended I-123 scan. The doctor wrote the prescription for I-131, when he meant it to be I-123. The event occurred on 8/9/2005 and was discovered on 8/11/2005. The doctor and patient have been notified.

**Event Date:** 08/09/2005**Discovery Date:** 08/11/2005**Report Date:** 08/16/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-1203-1

Name: FLAGLER HOSPITAL, INC.

NRC Docket Number: NA

City: SAINT AUGUSTINE

NRC Program Code: NA

State: FL Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: SAINT AUGUSTINE

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG DIAGNOSTIC STUDY OR THERAPY REQUESTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: Y Date Informed:

**Given:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131 Activity: 6.05 mCi 223.85 MBq

**Intended:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: SODIUM IODIDE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	I-131	
Manufacturer:	NR	Activity:	0.00605 Ci	0.22385 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41920	08/22/2005		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
FL05-113	09/13/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050919	09/19/2005		RLS	NRC LETTER

**Narrative:**

The licensee reported that a 61-year-old female patient was administered 1.55 MBq (42 uCi) of I-131 (NaI) without a written directive prepared or signed by the authorized user. The event was discovered during a routine audit of Nuclear Medicine records. The purpose of the administration was to ascertain the thyroid uptake fraction and image the thyroid tissue. The prescribed dose range, as set by the authorized user, was 0.3 to 0.67 MBq (8 to 18 uCi). The administered dose was 133% higher than the maximum dose allowed by the authorized user for this diagnostic procedure. Using NUREG CR-6435, the licensee estimated the patient's dose as 17.6 cGy (rad) to the thyroid and 1.64 cSv (rem) to the whole body. The licensee determined that the proper amount of I-131 had been ordered, but the radiopharmacy sent more than was ordered. Also, the nuclear medicine technologist failed to verify the dose against the requested study. Based on the licensee's dose estimates, the NRC believes that this event does not meet reportable requirements. An inspection of the licensee's program is planned for January 2006. Corrective actions taken by the licensee included procedure changes and conducting a training session regarding the requirements for written directives and changes in procedure.

**Event Date:** 07/14/2005**Discovery Date:** 07/20/2005**Report Date:** 07/21/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 45-19057-01

Name: MONTGOMERY REGIONAL HOSPITAL

NRC Docket Number: 03015297

City: BLACKSBURG

NRC Program Code: 02120

State: VA Zip Code: 24060

Responsible NRC Region: 1

**Site of Event:**

Site Name: BLACKSBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

---

**Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131 Activity: 0.042 mCi 1.554 MBq

**Intended:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

% Dose Exceeds Prescribed: 133

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR Activity: 0.000042 Ci 0.001554 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41860	07/25/2005		DCH	EVENT NOTIFICATION
LTR051103	11/07/2005		DCH	NRC LETTER

**Narrative:**

The licensee reported that a 25-year-old female patient was administered 1.15 MBq (31 uCi) of I-131 (NaI) without a written directive prepared or signed by the authorized user. The event was discovered during a routine audit of Nuclear Medicine records. The purpose of the administration was to ascertain the thyroid uptake fraction and image the thyroid tissue. The prescribed dose range, as set by the authorized user, was 0.3 to 0.67 MBq (8 to 18 uCi). The administered dose was 72% higher than the maximum dose allowed by the authorized user for this diagnostic procedure. Using NUREG CR-6435, the licensee estimated the patient's dose as 40.3 cGy (rad) to the thyroid and 1.21 cSv (rem) to the whole body. The licensee determined that the proper amount of I-131 had been ordered, but the radiopharmacy sent more than was ordered. Also, the nuclear medicine technologist failed to verify the dose against the requested study. Based on the licensee's dose estimates, the NRC believes that this event does not meet reporting requirements. An inspection of the licensee's program is planned for January 2006. Corrective actions taken by the licensee included procedure changes and conducting a training session regarding the requirements for written directives and changes in procedure.

**Event Date:** 07/18/2005**Discovery Date:** 07/20/2005**Report Date:** 07/21/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 45-19057-01

Name: MONTGOMERY REGIONAL HOSPITAL

NRC Docket Number: 03015297

City: BLACKSBURG

NRC Program Code: 02120

State: VA Zip Code: 24060

Responsible NRC Region: 1

**Site of Event:**

Site Name: BLACKSBURG

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**



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**Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131 Activity: 0.031 mCi 1.147 MBq

**Intended:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

% Dose Exceeds Prescribed: 72

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM Radionuclide or Voltage (kVp/MeV): I-131

Manufacturer: NR Activity: 0.000031 Ci 0.001147 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41860	07/25/2005		DCH	EVENT NOTIFICATION
LTR051103	11/07/2005		DCH	NRC LETTER
LTR051109	11/10/2005		DCH	NRC LETTER

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**Item Number: 050468****Last Updated: 08/17/2005****Narrative:**

The licensee reported that a patient was administered 0.74 GBq (20 mCi) of Tc-99m MDP for a bone scan instead of the prescribed dose of 0.3 GBq (8 mCi) of Tc-99m MAA for a lung perfusion test. The technologist selected the wrong syringe. Corrective actions taken by the licensee included re-instructing personnel.

**Event Date:** 06/09/2005**Discovery Date:** 06/09/2005**Report Date:** 06/13/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0389-37

Name: RADIOLOGY MEDICAL GROUP

NRC Docket Number: NA

City: SAN DIEGO

NRC Program Code: NA

State: CA Zip Code: 92103

Responsible NRC Region: 4

**Site of Event:**

Site Name: SAN DIEGO

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M Activity: 20 mCi 740 MBq

**Intended:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.02 Ci	0.74 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA754	07/19/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050816	08/17/2005		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee dispensed four Tc-99m diagnostic radiopharmaceutical doses that were mislabeled. All four doses were labeled as bone scan agents, but actually contained gal bladder imaging agents. Huntsville Hospital ordered three doses and Marshall Medical Center North ordered the fourth. All four doses were administered before the error was discovered. The licensee investigated incident and determined the cause was pharmacy error. A pharmacist mistakenly pulled a choletec vial off the shelf and placed it into an MDP tungsten container, then proceeded to compound the customers' requests. Corrective actions taken by the licensee included modifying procedures.

**Event Date:** 05/13/2005**Discovery Date:** 05/13/2005**Report Date:** 05/13/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: AL-1068

Name: CARDINAL HEALTH

NRC Docket Number: NA

City: HUNTSVILLE

NRC Program Code: NA

State: AL Zip Code: NR

Responsible NRC Region: 1

**Site of Event:**

Site Name: HUNTSVILLE

State: AL

**Additional Involved Party:**

License Number: NR

Name: HUNTSVILLE HOSPITAL

NRC Docket Number: NR

City: HUNTSVILLE

NRC Program Code: NR

State: AL Zip Code: NR

Responsible NRC Region: 1

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG VIAL SELECTED WHEN DRAWING DOSE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: GALLBLADDER

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: GALLBLADDER

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99 Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 3**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: GALLBLADDER

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Patient Number: 4**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: GALLBLADDER

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**  
Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM      Radionuclide or Voltage (kVp/MeV): TC-99M  
Manufacturer: NR      Activity: NR Ci      NR GBq  
Model Number: NA  
Serial Number: NA

**Source Number: 2**  
Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM      Radionuclide or Voltage (kVp/MeV): TC-99M  
Manufacturer: NR      Activity: NR Ci      NR GBq  
Model Number: NA  
Serial Number: NA

**Source Number: 3**  
Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM      Radionuclide or Voltage (kVp/MeV): TC-99M  
Manufacturer: NR      Activity: NR Ci      NR GBq  
Model Number: NA  
Serial Number: NA

**Source Number: 4**  
Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM      Radionuclide or Voltage (kVp/MeV): TC-99M  
Manufacturer: NR      Activity: NR Ci      NR GBq  
Model Number: NA  
Serial Number: NA

**Device/Associated Equipment:**  
MD2

**Device Number: 1**  
Device Name: SYRINGE      Model Number: NA  
Manufacturer: NR      Serial Number: NA

**Device Number: 2**  
Device Name: SYRINGE      Model Number: NA  
Manufacturer: NR      Serial Number: NA

**Device Number: 3**  
Device Name: SYRINGE      Model Number: NA  
Manufacturer: NR      Serial Number: NA

**Device Number: 4**  
Device Name: SYRINGE      Model Number: NA  
Manufacturer: NR      Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
AL050029	07/05/2005		DCH	AGREEMENT STATE EVENT REPORT
AL050029A	08/11/2005		DCH	AGREEMENT STATE EVENT REPORT

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**Item Number: 050408****Last Updated: 05/30/2006****Narrative:**

The licensee reported that a patient was administered 0.67 GBq (18.1 mCi) of Tc-99m HDP for a bone scan instead of the prescribed 0.13 GBq (3.5 mCi) of Tl-201 for a cardiac scan. The imaging technologist selected the wrong syringe. Corrective action taken by the licensee included re-instructing personnel.

**Event Date:** 05/17/2005**Discovery Date:** 05/17/2005**Report Date:** 05/26/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1394-01

Name: SAINT ROSE HOSPITAL

NRC Docket Number: NA

City: HAYWARD

NRC Program Code: NA

State: CA Zip Code: 94545

Responsible NRC Region: 4

**Site of Event:**

Site Name: HAYWARD

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: HYDROXYMETHYLENE DIPHOSPHONATE

Radionuclide: TC-99M Activity: 18.1 mCi 669.7 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0181 Ci 0.6697 GBq
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA749	06/21/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060526	05/30/2006		DCH	AGREEMENT STATE LETTER



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**Item Number: 050407****Last Updated: 11/06/2006****Narrative:**

The licensee reported administering a dose of Tc-99m mebrofenin instead of the prescribed dose of Tc-99m MAA. The licensee determined that the pharmacist and technician had drawn the patient dose from the wrong product vial.

**Event Date:** 05/09/2005**Discovery Date:** 05/09/2005**Report Date:** 05/17/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-2541-19

Name: TARZANA REGIONAL MEDICAL CENTER

NRC Docket Number: NA

City: TARZANA

NRC Program Code: NA

State: CA Zip Code: 91356

Responsible NRC Region: 4

**Site of Event:**

Site Name: TARZANA

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG VIAL SELECTED WHEN DRAWING DOSE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M

Activity:

NR mCi

NR MBq

**Intended:**

Diagnostic Study: NR

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	NR Ci	NR GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA748	06/21/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR061031	11/06/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient scheduled for 0.925 GBq (25 mCi) of Tc-99m tetrafosin for a cardiac stress test was mistakenly given 0.888 GBq (24 mCi) of Tc-99m MDP for a bone scan. The imaging technologist failed to verify the syringe's contents. Corrective action taken by the licensee included implementing new procedures for handling and labeling radiopharmaceuticals.

Event Date: 04/13/2005

Discovery Date: 04/13/2005

Report Date: 05/04/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1335-19

Name: REGENTS OF THE UNIVERSITY OF CALIFORNIA - LA

NRC Docket Number: NA

City: LOS ANGELES

NRC Program Code: NA

State: CA Zip Code: 90095

Responsible NRC Region: 4

**Site of Event:**

Site Name: LOS ANGELES

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M Activity: 24 mCi 888 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVUE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.025 Ci	0.925 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA746	06/01/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060203	02/06/2006		DCH	AGREEMENT STATE LETTER

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**Item Number: 050365****Last Updated: 11/06/2006****Narrative:**

The licensee reported that a patient scheduled for 0.31 GBq (8.5 mCi) of Xe-133 for a lung ventilation study was mistakenly given 0.15 GBq (4 mCi) of Tc-99m for a lung perfusion study. The ward clerk ordered the wrong study for the patient.

**Event Date:** 02/16/2005**Discovery Date:** 02/16/2005**Report Date:** 05/12/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0788-19

Name: SAN PEDRO HOSPITAL

NRC Docket Number: NA

City: SAN PEDRO

NRC Program Code: NA

State: CA Zip Code: 90732

Responsible NRC Region: 4

**Site of Event:**

Site Name: SAN PEDRO

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG DIAGNOSTIC STUDY OR THERAPY REQUESTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: NR

Radionuclide: TC-99M Activity: 4 mCi 148 MBq

**Intended:**

Diagnostic Study: LUNG VENTILATION

Radiopharmaceutical: GAS

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.004 Ci	0.148 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA740	05/31/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR061031	11/06/2006		DCH	AGREEMENT STATE LETTER

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**Item Number: 050361****Last Updated: 06/01/2005****Narrative:**

The licensee reported that a patient scheduled to receive 370 MBq (10 mCi) of Tc-99m MIBI for a cardiac stress test was administered 9.1 MBq (246 uCi) of I-123 for a thyroid uptake study. The imaging technologist failed to verify the patient's identification. Nuclear medicine staff has been reinstructed on the proper method for patient identification.

**Event Date:** 04/21/2005**Discovery Date:** 04/21/2005**Report Date:** 04/26/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1703-12

Name: SAINT JOSEPH HOSPITAL

NRC Docket Number: NA

City: EUREKA

NRC Program Code: NA

State: CA Zip Code: 95501

Responsible NRC Region: 4

**Site of Event:**

Site Name: EUREKA

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG PATIENT SELECTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: THYROID UPTAKE MEASUREMENT

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.246 mCi 9.102 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-123

Manufacturer: NR

Activity: 0.000246 Ci 0.009102 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA737	05/31/2005		DCH	AGREEMENT STATE EVENT REPORT
CA-XCA737A	06/01/2005		DCH	AGREEMENT STATE EVENT REPORT



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**Item Number: 050358****Last Updated: 02/06/2006****Narrative:**

The licensee reported that a patient received 0.74 GBq (20 mCi) of Tc-99m sestamibi instead of the prescribed 0.74 GBq (20 mCi) of Tc-99m MDP for a bone scan. The imaging technologist selected the wrong radiopharmaceutical from the hot laboratory. Corrective actions taken by the licensee included reprimanding involved personnel and re-instructing personnel.

**Event Date:** 04/27/2005**Discovery Date:** 04/27/2005**Report Date:** 04/29/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0107-36

Name: SAN ANTONIO COMMUNITY HOSPITAL

NRC Docket Number: NA

City: UPLAND

NRC Program Code: NA

State: CA Zip Code: 91739

Responsible NRC Region: 4

**Site of Event:**

Site Name: UPLAND

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL REPRIMANDED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

20 mCi

740 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.02 Ci	0.74 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA735	05/26/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060203	02/06/2006		DCH	AGREEMENT STATE LETTER

---

**Item Number: 050357****Last Updated: 08/09/2006****Narrative:**

The licensee reported that a patient received 0.41 GBq (11 mCi) of F-18 FDG for a PET scan instead of the prescribed 0.74 GBq (20 mCi) of Tc-99m MDP for a bone scan. The imaging technologist did not verify the requisition. Corrective actions taken by the licensee included implementing new procedures.

**Event Date:** 03/29/2005**Discovery Date:** 03/29/2005**Report Date:** 04/13/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-7109-19

Name: ANTELOPE VALLEY OUTPATIENT IMAGING CENTER

NRC Docket Number: NA

City: LANCASTER

NRC Program Code: NA

State: CA Zip Code: 93534

Responsible NRC Region: 4

**Site of Event:**

Site Name: LANCASTER

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: PET SCAN

Radiopharmaceutical: FDG (FLUORODEOXYGLUCOSE)

Radionuclide: F-18 Activity: 11 mCi 407 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	F-18	
Manufacturer:	NR	Activity:	0.011 Ci	0.407 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA736	05/26/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060807	08/09/2006		DCH	AGREEMENT STATE LETTER

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**Item Number: 050344****Last Updated: 02/27/2006****Narrative:**

The licensee reported that a patient was administered 0.37 GBq (10 mCi) of Tc-99m MDP for a bone scan instead of the prescribed 0.37 GBq (10 mCi) of Tc-99m pertechnetate for a thyroid scan. It was determined that the radiopharmacy had mislabeled the syringe.

**Event Date:** 04/08/2005**Discovery Date:** 04/08/2005**Report Date:** 04/28/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0456-38

Name: CALIFORNIA PACIFIC MEDICAL CENTER

NRC Docket Number: NA

City: SAN FRANCISCO

NRC Program Code: NA

State: CA Zip Code: 94114

Responsible NRC Region: 4

**Site of Event:**

Site Name: SAN FRANCISCO

State: CA

**Additional Involved Party:**

License Number: NR

Name: NR

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M Activity: 10 mCi 370 MBq

**Intended:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4)

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.01 Ci	0.37 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA733	05/19/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060224	02/27/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient scheduled to receive 0.93 GBq (25 mCi) of Tc-99m HDP was administered 0.96 GBq (26 mCi) of Tc-99m cardiolite. The Nuclear Medicine technologist selected the wrong syringe from the dosage cart. The radiologist and referring physician were notified. The doctor informed the patient and the diagnostic study was rescheduled for 4/28/2005. Corrective action taken by the licensee included retraining involved personnel.

Event Date: 04/26/2005

Discovery Date: 04/26/2005

Report Date: 04/26/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1731-43

Name: GOOD SAMARITAN HOSPITAL

NRC Docket Number: NA

City: SAN JOSE

NRC Program Code: NA

State: CA Zip Code: 95124

Responsible NRC Region: 4

**Site of Event:**

Site Name: SAN JOSE

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 04/26/2005

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

26 mCi

962 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: HYDROXYMETHYLENE DIPHOSPHONATE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.026 Ci	0.962 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA730	05/18/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050519	06/01/2005		DCH	AGREEMENT STATE LETTER
LTR050524	06/01/2005		DCH	AGREEMENT STATE LETTER



**Narrative:**

The licensee reported that a patient not scheduled to receive radioactive material was administered 0.42 GBq (11.4 mCi) of Tc-99m MIBI for a myocardial perfusion scan. The event occurred because the imaging technologist misunderstood the order in the patient's chart. Corrective actions taken by the licensee included counseling the technician regarding his failure to follow established procedures and providing additional training to the technologist.

Event Date: 04/12/2005

Discovery Date: 04/12/2005

Report Date: 04/15/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-2425-33

Name: EISENHOWER MEDICAL CENTER

NRC Docket Number: NA

City: RANCHO MIRAGE

NRC Program Code: NA

State: CA Zip Code: 92270

Responsible NRC Region: 4

**Site of Event:**

Site Name: RANCHO MIRAGE

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: MYOCARDIAL PERFUSION

Radiopharmaceutical: MIBI (METHOXY ISOBUTYL ISONITR

Radionuclide: TC-99M

Activity:

11.4 mCi

421.8 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0114 Ci 0.4218 GBq
Model Number:	NA		
Serial Number:	NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA726	05/18/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050511	05/18/2005		DCH	AGREEMENT STATE LETTER
LTR050527	06/01/2005		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee (dba Lake City Medical Center) reported that a patient scheduled for a parathyroid scan with Tc-99m instead received a thyroid scan with 10.43 MBq (282 uCi) of I-123. The patient had no thyroid. The patient received the wrong test, radionuclide, and image area. The patient and doctor were notified the same day. It was determined that the scheduler didn't reconcile the order with the test scheduled, the desk clerk was new and didn't know the difference, the technologist assistant didn't obtain a copy of the actual order and only had the computer generated order, and the technologist was a temporary filling in for a vacationing technologist and didn't follow proper procedures. A Florida Department of Health investigator found that the written procedures were adequate, but not followed. Corrective actions taken by the licensee included training to insure written procedures are followed.

Event Date: 03/30/2005

Discovery Date: 03/30/2005

Report Date: 04/12/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: FL-1193-2

Name: NOTAMI HOSPITALS OF FLORIDA, INC.

NRC Docket Number: NA

City: LAKE CITY

NRC Program Code: NA

State: FL Zip Code: 32055

Responsible NRC Region: 1

**Site of Event:**

Site Name: LAKE CITY

State: FL

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:**

---

**Patient Number:** 1

Patient Informed: Y

Date Informed: 03/30/2005

**Given:**

Diagnostic Study: THYROID IMAGING

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-123 Activity: 0.000282 mCi 0.010434 MBq

**Intended:**

Diagnostic Study: PARATHYROID

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): I-123

Manufacturer: NR

Activity: 0.000282 Ci 0.010434 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
FL05-060	05/11/2005		DCH	AGREEMENT STATE EVENT REPORT
FL05-060A	08/04/2005		DCH	AGREEMENT STATE EVENT REPORT

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**Item Number: 050277****Last Updated: 02/06/2006****Narrative:**

The licensee reported that a patient, not scheduled to receive any radiopharmaceutical, was administered 18.5 MBq (0.5 mCi) of Tc-99m DTPA for a lung scan. The technologist failed to check the patient's chart prior to administration. Corrective actions taken by the licensee included re-instructing personnel.

**Event Date:** 01/26/2005**Discovery Date:** 01/26/2005**Report Date:** 03/22/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-3834-15

Name: BAKERSFIELD MEMORIAL HOSPITAL

NRC Docket Number: NA

City: BAKERSFIELD

NRC Program Code: NA

State: CA Zip Code: 93303

Responsible NRC Region: 4

**Site of Event:**

Site Name: BAKERSFIELD

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: DTPA (DIETHYLTRIAMINE-PENTAACE

Radionuclide: TC-99M Activity: 0.5 mCi 18.5 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.0005 Ci	0.0185 GBq
Model Number:	NA			
Serial Number:	NA			

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA715	04/20/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR060203	02/06/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient prescribed to receive 1 GBq (27 mCi) of Tc-99m myoview instead received 0.93 GBq (25 mCi) of Tc-99m MDP. The hot laboratory technologist selected the wrong syringe. Corrective actions taken by the licensee included implementing a new procedure for radiopharmaceutical labeling and handling, and re-instructing personnel.

Event Date: 02/28/2005

Discovery Date: 03/07/2005

Report Date: 03/15/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0670-37

Name: GROSSMONT HOSPITAL

NRC Docket Number: NA

City: LA MESA

NRC Program Code: NA

State: CA Zip Code: 91942

Responsible NRC Region: 4

**Site of Event:**

Site Name: LA MESA

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity:

25 mCi

925 MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEW

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.025 Ci	0.925 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA703	04/19/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050622	06/23/2005		DCH	AGREEMENT STATE LETTER



**Narrative:**

The licensee reported that two patients were injected with Tc-99m pertechnetate instead of the intended doses of Tc-99m Cardiolite. Following the administrations, planar images showed the classical Tc-99m pertechnetate distribution. The radiopharmacy (Cardinal Health) was notified and determined that there was inadequate binding to the sestamibi in the kit vials (the tag was as low as 76.5%). The radiopharmacy will determine if other customers experienced a tagging problem.

Event Date: 03/09/2005

Discovery Date: 03/09/2005

Report Date: 03/14/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0059-19

Name: PROVIDENCE SAINT JOSEPH MEDICAL CENTER

NRC Docket Number: NA

City: BURBANK

NRC Program Code: NA

State: CA Zip Code: 91505

Responsible NRC Region: 4

**Site of Event:**

Site Name: BURBANK

State: CA

**Additional Involved Party:**

License Number: NR

Name: CARDINAL HEALTH

NRC Docket Number: NR

City: NR

NRC Program Code: NR

State: NR Zip Code: NR

Responsible NRC Region: NR

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

Old Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Patient Number: 2**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

Radionuclide: TC-99M Activity: NR mCi NR MBq

**Intended:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: CARDINAL HEALTH

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): TC-99M

Activity: NR Ci NR GBq

**Source Number: 2**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Manufacturer: CARDINAL HEALTH

Model Number: NA

Serial Number: NA

Radionuclide or Voltage (kVp/MeV): TC-99M

Activity: NR Ci NR GBq

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA708	04/18/2005		RLS	AGREEMENT STATE EVENT REPORT
LTR061207	12/12/2006		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient was administered 910.2 MBq (24.6 mCi) of Tc-99m MDP for a bone scan on 3/24/2005 when no procedure was scheduled. The patient had received a bone scan on 2/16/2005 and was questioned by the technologist as to why she was having another scan so soon. The patient checked with the office and was told that there was a new order dated 3/17/2005. When the physician's office opened that morning, the licensee asked for verification of the order, which the physician denied.

Event Date: 03/24/2005

Discovery Date: 03/24/2005

Report Date: 04/01/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-6695-40

Name: RADIOLOGY DIAGNOSTIC CENTER

NRC Docket Number: NA

City: TEMPLETON

NRC Program Code: NA

State: CA Zip Code: 93465

Responsible NRC Region: 4

**Site of Event:**

Site Name: TEMPLETON

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 03/24/2005

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity:

24.6 mCi

910.2 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.0246 Ci 0.9102 GBq
Model Number:	NA		
Serial Number:	NA		

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA706	04/18/2005		RLS	AGREEMENT STATE EVENT REPORT
LTR050920	09/21/2005		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient (66 year-old-female) received 1.11 GBq (30 mCi) of Tc-99m instead of the prescribed dose of 0.11 GBq (3 mCi) of Tl-201. The resident physician reviewed the prescribing physician's order for administration of a brain scan diagnostic test to image a tumor and instructed the technician to perform a standard brain scan, which images blood flow. The technician administered the Tc-99m as instructed rather than the Tl-201 prescribed. The RSO noted that the test performed would result in a total dose of 0.322 cGy (rad) and a urinary bladder wall dose of 8.1 cGy (rad). The error was identified by the Director of Nuclear Medicine during review. The patient has not been informed and will be rescheduled for the appropriate diagnostic test.

Event Date: 04/06/2005

Discovery Date: 04/06/2005

Report Date: 04/06/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 45-00034-26

Name: UNIVERSITY OF VIRGINIA

NRC Docket Number: 03003296

City: CHARLOTTESVILLE

NRC Program Code: 02110

State: VA Zip Code: 22903

Responsible NRC Region: 1

**Site of Event:**

Site Name: CHARLOTTESVILLE

State: VA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: HUMAN ERROR

Old Cause: WRONG DIAGNOSTIC STUDY OR THERAPY REQUESTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number:** 1

Patient Informed: N

Date Informed:

**Given:**

Diagnostic Study: BRAIN SCAN

Radiopharmaceutical: NR

Radionuclide: TC-99M

Activity:

30 mCi

1110 MBq

**Intended:**

Diagnostic Study: BRAIN SCAN

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

---

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.03 Ci

1.11 GBq

Model Number: NA

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

EN41572

04/07/2005

DCH

EVENT NOTIFICATION

**Narrative:**

The licensee reported that a patient scheduled for a prostate implant received 83 I-125 seeds, each containing an activity of 11.47 MBq (0.31 mCi), and 15 Pd-103 seeds, each containing an activity of 44.4 MBq (1.2 mCi). The patient was prescribed 98 I-125 seeds. The patient received 98% of the planned dose. The holders for the I-125 seeds and the Pd-103 seeds are similar in shape and size. The Ohio Bureau of Radiation Protection investigated the event on 3/21/2005. Results revealed that two patients were scheduled to receive permanent seed implants for prostate cancer. The sealed source containers for both patients were taken to the operating room. At some point during the procedure, one cartridge containing 15 Pd-103 seeds was implanted into the patient who was to receive I-125 seeds. The patient and referring physician were notified of the event on 3/11/2005. The licensee has instituted a new procedure where only one sealed source container will be taken into the operating room. The staff has received training on the new procedure. The Ohio Bureau of Radiation Protection will periodically inspect the licensee to insure that the corrective action is implemented and is adequate.

Event Date: 03/11/2005

Discovery Date: 03/11/2005

Report Date: 03/16/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: OH-02120850007

Name: MARIETTA MEMORIAL HOSPITAL

NRC Docket Number: NA

City: MARIETTA

NRC Program Code: NA

State: OH Zip Code: 45750

Responsible NRC Region: 3

**Site of Event:**

Site Name: MARIETTA

State: OH

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: INATTENTION TO DETAIL

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

3 IMPROVE RADIOACTIVE MATERIAL LABELING AND HANDLING

**Patient Information:**

---

**Patient Number: 1**

Patient Informed: Y

Date Informed: 03/11/2005

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: PD-103 Activity: 18 mCi 666 MBq Dose: 27000 rad 270 Gy

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 2

Effect on Patient:

**Patient Number: 1A**

Patient Informed: Y

Date Informed: 03/11/2005

**Given:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 25.73 mCi 952.01 MBq Dose: NR rad NR Gy

**Intended:**

Therapeutic Procedure: BRACHY, MANUAL IMPLANT

Organ: PROSTATE

Radiopharmaceutical: NA

Radionuclide: I-125 Activity: 30.38 mCi 1124.06 MBq Dose: NR rad NR Gy

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: 2

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: BEST INDUSTRIES

Model Number: 2335

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): PD-103

Activity: 0.018 Ci 0.666 GBq

**Source Number: 2**

Source/Radioactive Material: SEALED SOURCE BRACHYTHERAPY

Manufacturer: BEST INDUSTRIES

Model Number: 2301

Serial Number: AGGREGATE

Radionuclide or Voltage (kVp/MeV): I-125

Activity: 0.02573 Ci 0.95201 GBq

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41507	03/24/2005		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
OH050012	03/28/2005		DCH	AGREEMENT STATE EVENT REPORT
OH050012A	04/14/2005		DCH	AGREEMENT STATE EVENT REPORT



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**Item Number: 050171****Last Updated: 06/23/2005****Narrative:**

The licensee reported that a patient was administered 1 GBq (27 mCi) of Tc-99m myoview for a cardiac scan instead of the prescribed 1 GBq (27 mCi) of Tc-99m MDP for a bone scan. The event occurred because the imaging technologist selected the wrong syringe.

**Event Date:** 01/26/2005**Discovery Date:** 01/26/2005**Report Date:** 02/10/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0670-37

Name: SHARP GROSSMONT HOSPITAL

NRC Docket Number: NA

City: LA MESA

NRC Program Code: NA

State: CA Zip Code: 91942

Responsible NRC Region: 4

**Site of Event:**

Site Name: LA MESA

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M

Activity:

27 mCi

999 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M

Activity:

27 mCi

999 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M
Manufacturer:	NR	Activity:	0.027 Ci 0.999 GBq
Model Number:	NA		
Serial Number:	NA		

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA691	03/22/2005		DCH	AGREEMENT STATE EVENT REPORT
LTR050622	06/23/2005		DCH	AGREEMENT STATE LETTER

**Narrative:**

The licensee reported that a patient was administered 1 GBq (27 mCi) of Tc-99m MDP for a bone scan instead of the prescribed 185 MBq (5 mCi) of I-131 for a total body scan. The event was caused by an error in transcription of the order by a student technologist. The patient and physician were notified of the error and the correct radiopharmaceutical was later administered. The senior technologist was reprimanded by the Radiology Department Head for not properly supervising the procedure. The State of Louisiana Department of Environmental Quality performed an investigation of the incident.

**Event Date:** 01/26/2005**Discovery Date:** 01/26/2005**Report Date:** 03/03/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: LA-0004-L01

Name: TULANE UNIVERSITY

NRC Docket Number: NA

City: NEW ORLEANS

NRC Program Code: NA

State: LA Zip Code: 70112

Responsible NRC Region: 4

**Site of Event:**

Site Name: NEW ORLEANS

State: LA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: TECHNOLOGIST SELECTED WRONG RADIOPHARMACEUTICAL FOR UNIT DOSE

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL REPRIMANDED

**Patient Information:****Patient Number:** 1

Patient Informed: Y

Date Informed: 01/26/2005

**Given:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

Radionuclide: TC-99M Activity: 27 mCi 999 MBq

**Intended:**

Diagnostic Study: WHOLE BODY I-131/THYROID

Radiopharmaceutical: SODIUM IODIDE

Radionuclide: I-131 Activity: 5 mCi 185 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.027 Ci

0.999 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41478	03/15/2005		DCH	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LA050003	01/31/2006		DCH	AGREEMENT STATE EVENT REPORT

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**Item Number: 050122****Last Updated: 02/28/2005****Narrative:**

The licensee reported that a patient was prescribed 185 MBq (5 mCi) of Tc-99m MAA for a lung scan, but was administered 185 MBq (5 mCi) of Tc-99m choletec. The cause of the event was determined to be that the pharmacy had mislabeled the syringe. Corrective actions taken by the pharmacy included revising vial shields and labels.

**Event Date:** 01/10/2005**Discovery Date:** 01/10/2005**Report Date:** 01/24/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1380-45

Name: SHASTA REGIONAL MEDICAL CENTER

NRC Docket Number: NA

City: REDDING

NRC Program Code: NA

State: CA Zip Code: 96001

Responsible NRC Region: 4

**Site of Event:**

Site Name: REDDING

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: SYRINGE MISLABELED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PROCEDURE MODIFIED

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: MEBROFENIN/CHOLETECH

Radionuclide: TC-99M Activity: 5 mCi 185 MBq

**Intended:**

Diagnostic Study: LUNG PERFUSION

Radiopharmaceutical: MAA (MACROAGGREGATED ALBUMIN)

Radionuclide: TC-99M Activity: 5 mCi 185 MBq

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

---

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.005 Ci 0.185 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
CA-XCA679	02/28/2005		DCH	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient was prescribed a cardiac study using Tc-99m cardiolite. The procedure was cancelled, but the Nuclear Medicine Department was not aware of the cancellation. The patient was administered 0.3 GBq (8 mCi) of Tc-99m cardiolite because the technician failed to check the patient's chart prior to administration. Corrective actions taken by the licensee included implementing a new procedure and retraining personnel.

Event Date: 01/18/2005

Discovery Date: 01/18/2005

Report Date: 01/19/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1021-30

Name: WEST ANAHEIM MEDICAL CENTER

NRC Docket Number: NA

City: ANAHEIM

NRC Program Code: NA

State: CA Zip Code: 92804

Responsible NRC Region: 4

**Site of Event:**

Site Name: ANAHEIM

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: FAILURE TO FOLLOW PROCEDURE OR WRONG PROCEDURE USED

Old Cause: PROCEDURE NOT FOLLOWED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NEW PROCEDURE WRITTEN

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number:** 1

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

Radionuclide: TC-99M

Activity:

8 mCi

296 MBq

**Intended:**

A therapeutic procedure/diagnostic study was not intended.

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

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MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.008 Ci

0.296 GBq

Model Number: NA

Serial Number: NA

**References:**

**Reference Number:**

**Entry Date:**

**Retraction Date:**

**Coder Initials:**

**Reference Type:**

CA-XCA672

02/23/2005

DCH

AGREEMENT STATE EVENT REPORT



**Narrative:**

The licensee reported that a patient received a dose to an incorrect site. A nuclear medicine technician attempted to inject 1.21 GBq (32.7 mCi) of Tc-99m into an implanted single lumen port near the left breast of a female patient for a red blood cell study. After injecting 0.78 GBq (21.1 mCi), the technician noticed resistance and could not deliver the rest of the dose. A scan of the patient indicated that the material was not metabolizing. The nuclear medicine physician determined that the dose had been delivered to a 15 to 30 cubic centimeter volume of tissue around the port. The committed absorbed dose to this tissue volume was estimated to be on the order of 52.7 to 83.2 cGy (rad). The patient was notified and no deleterious effects are expected. The licensee has not determined if the internal line was crimped by the patient or if the port failed.

Event Date: 02/04/2005

Discovery Date: 02/04/2005

Report Date: 02/04/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: NO

Reciprocity: NONE

License Number: 06-13022-02

Name: UNIVERSITY OF CONNECTICUT HEALTH CENTER

NRC Docket Number: 03001295

City: FARMINGTON

NRC Program Code: 02110

State: CT Zip Code: 06030

Responsible NRC Region: 1

**Site of Event:**

Site Name: FARMINGTON

State: CT

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: N

Investigation: N

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: N

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: NOT REPORTED

Old Cause: NOT REPORTED

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 NOT REPORTED

**Patient Information:**

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**Patient Number:** 1

Patient Informed: Y

Date Informed:

**Given:**

Diagnostic Study: RBC VOLUME MEASUREMENT

Radiopharmaceutical: NR

Radionuclide: TC-99M

Activity:

21.1 mCi

780.7 MBq

**Intended:**

Diagnostic Study: RBC VOLUME MEASUREMENT

Radiopharmaceutical: NR

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

**Source Number:** 1

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.0211 Ci

0.7807 GBq

Model Number: NA

Serial Number: NA

**References:**

Reference Number:	Entry Date:	Retraction Date:	Coder Initials:	Reference Type:
EN41375	02/07/2005	02/09/2005	RLS	EVENT NOTIFICATION
EN41375A	02/10/2005	02/09/2005	RLS	EVENT NOTIFICATION

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**Item Number: 050064****Last Updated: 01/27/2005****Narrative:**

The licensee reported that a patient was administered 814 MBq (22 mCi) of Tc-99m Myoview instead of the prescribed dose of 740 MBq (20 mCi) of Tc-99m MDP for a bone scan. The imaging technologist selected the wrong syringe. Corrective actions included re-instructing personnel.

**Event Date:** 01/12/2005**Discovery Date:** 01/12/2005**Report Date:** 01/12/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0920-30

Name: SOUTH COAST MEDICAL CENTER

NRC Docket Number: NA

City: LAGUNA BEACH

NRC Program Code: NA

State: CA Zip Code: 92651

Responsible NRC Region: 4

**Site of Event:**

Site Name: LAGUNA BEACH

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

---

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M Activity: 22 mCi 814 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.022 Ci	0.814 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
CA-XCA669	01/27/2005		RLS	AGREEMENT STATE EVENT REPORT

**Narrative:**

The licensee reported that a patient was administered 444 MBq (12 mCi) of Tc-99m Myoview instead of the prescribed dose of 740 MBq (20 mCi) of Tc-99m MDP for a bone scan. The imaging technologist selected the wrong syringe and did not verify the dose. Corrective actions included implementing new procedures, retraining personnel, and reprimanding the technologist.

Event Date: 01/06/2005

Discovery Date: 01/06/2005

Report Date: 01/06/2005

**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-0450-37

Name: SCRIPPS CLINIC TORREY PINES

NRC Docket Number: NA

City: LA JOLLA

NRC Program Code: NA

State: CA Zip Code: 92037

Responsible NRC Region: 4

**Site of Event:**

Site Name: LA JOLLA

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

- 1 NEW PROCEDURE WRITTEN
- 2 PERSONNEL RECEIVED ADDITIONAL TRAINING
- 3 PERSONNEL REPRIMANDED

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: CARDIAC SCAN

Radiopharmaceutical: MYOVIEW

Radionuclide: TC-99M

Activity:

12 mCi

444 MBq

**Intended:**

Diagnostic Study: BONE SCAN

Radiopharmaceutical: MDP/MEDRONATE/OSTEOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

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**Source of Radiation:**

MD2

**Source Number: 1**

Source/Radioactive Material: UNSEALED SOURCE RADIOPHARM

Radionuclide or Voltage (kVp/MeV): TC-99M

Manufacturer: NR

Activity: 0.012 Ci 0.444 GBq

Model Number: NA

Serial Number: NA

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name: SYRINGE

Model Number: NA

Manufacturer: NR

Serial Number: NA

**References:****Reference Number:****Entry Date:****Retraction Date:****Coder Initials:****Reference Type:**

CA-XCA667

01/27/2005

RLS

AGREEMENT STATE EVENT REPORT

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**Item Number: 050062****Last Updated: 01/27/2005****Narrative:**

The licensee reported that a patient was administered 1.07 GBq (29 mCi) of Tc-99m pertechnetate instead of the prescribed dose of 1.07 GBq (29 mCi) of Tc-99m Cardiolite. The imaging technologist selected the wrong syringe. Corrective actions included retraining personnel and reprimanding the technologist.

**Event Date:** 01/01/2005**Discovery Date:** 01/01/2005**Report Date:** 01/07/2005**Licensee/Reporting Party Information:**

Agreement State Regulated: YS

Reciprocity: NONE

License Number: CA-1593-34

Name: MERCY SAN JUAN MEDICAL CENTER

NRC Docket Number: NA

City: CARMICHAEL

NRC Program Code: NA

State: CA Zip Code: 95608

Responsible NRC Region: 4

**Site of Event:**

Site Name: CARMICHAEL

State: CA

**Additional Involved Party:**

License Number: NA

Name: NA

NRC Docket Number: NA

City: NA

NRC Program Code: NA

State: NA Zip Code: NA

Responsible NRC Region: NA

**Other Information:**

NRC Reportable Event: N

Abnormal Occurrence: N

Agreement State Reportable Event: Y

Investigation: Y

Atomic Energy Act Material: Y

NMED Record Complete: Y

Consultant Hired: N

Event Closed by Region/State: Y

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**Event Type:**

MD2 - MEDICAL EVENT

**Event Cause:**

MD2

Cause: INATTENTION TO DETAIL

Old Cause: WRONG SYRINGE SELECTED FROM DOSAGE CART

**Corrective Actions Information:**

Action Number: Corrective Action:

MD2

1 PERSONNEL REPRIMANDED

2 PERSONNEL RECEIVED ADDITIONAL TRAINING

**Patient Information:****Patient Number: 1**

Patient Informed: U

Date Informed:

**Given:**

Diagnostic Study: NR

Radiopharmaceutical: SPERT/PERT (PERTECHNETATE-TCO4

Radionuclide: TC-99M

Activity:

29 mCi

1073 MBq

**Intended:**

Diagnostic Study: CARDIAC

Radiopharmaceutical: SESTAMIBI/CARDIOLITE

% Dose Exceeds Prescribed: NA

% Dose is Less Than Prescribed: NA

Effect on Patient:

**Source of Radiation:**

MD2

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**Source Number: 1**

Source/Radioactive Material:	UNSEALED SOURCE RADIOPHARM	Radionuclide or Voltage (kVp/MeV):	TC-99M	
Manufacturer:	NR	Activity:	0.029 Ci	1.073 GBq
Model Number:	NA			
Serial Number:	NA			

**Device/Associated Equipment:**

MD2

**Device Number: 1**

Device Name:	SYRINGE	Model Number:	NA
Manufacturer:	NR	Serial Number:	NA

**References:**

<b>Reference Number:</b>	<b>Entry Date:</b>	<b>Retraction Date:</b>	<b>Coder Initials:</b>	<b>Reference Type:</b>
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